VOLUME 11, NO.1 SPRING, 1960

NAUTICAL RESEARCH JOURNAL

PUBLISHED BY THE NAUTICAL RESEARCH GUILD

FOUR-MASTED BARK *ACME*

INTRODUCTION OF NEW MEMBERS

REGINALD JOHN COLLINS - 6 Blackthorne Road, Great Bookham, Surrey, England: advises that he is a model builder, a little bit of an artist, and a part-time professional assistant (ships) at the Science Museum, London. He is a member of the Hammersmith Ship Model Society, the Society for Nautical Research, and the Guild of Model Shipwrights. Mr. Collins is interested in ships of the northern countries of the pre-1815 era.

CHARLES D. CRABIEL - 6618 S. Crescent Blvd., Pennsauken 8, New Jersey: writes that he is particularly interested in ship building in southern New Jersey and in sailing ships of all periods. He is a model builder and would like to compare notes with others on taking lines off half-hull ship models.

JOHN L. DORROTHY - 74 Berkeley Avenue, Bloomfield, New Jersey; informs us he is a model builder interested in the period of 1750 - 1910. He would like to become better acquainted with members specializing in the ship-in-bottle construction. Mr. Dorrothy is an underwater fisherman.

CHARLES G. GLUECK - 105 Surrey Road, Philadelphia, Pennsylvania: is interested in painting and the collection of old paintings of packets, clippers, Down Easters, and schooners built or owned in New England. Mr. Glueck carries on extensive research in Maine-built craft during summer vacations in New England.

HERBERT GOLDSTEIN - 911 Walton Avenue, New York 52, New York: advises, "My interests are in all nautical affairs of the 'Age of spritsail-topmast' - say 1660-1710. A decade beyond each limit and my interest drops rather rapidly. It's an age of specialization!"

H. LANDMAN (TT60470) - Keizarsgracht 5, Amsterdam, Holland: Subscriber to the Journal.

WILLIAM C. NORTH, JR. - 34 Campbell Street, River Plaza, Red Bank, New Jersey: informs us his nautical interest began with the study of shipwrecks on the New Jersey coast. He has been an ardent skin-diver and has visited many forgotten ocean-floor wrecks. Attempts have been made to identify as many as possible, and drawings have been made where dirty water made photography impossible. Mr. North hopes to make his findings available to others in the future. He collects shipwreck drawings and photographs. For diversion he constructs ship-in-bottle exhibits.

MARION D. OAKLEY - 806 Hepler Road, Richmond 29, Virginia: is a model builder interested in late 18th and 19th century sailing craft, and a member of the Richmond Ship Model Society. Mr. Oakley is particularly interested in vessels of the Chesapeake Bay and the Confederate States Navy. He is a miniaturist and finds that models constructed to 1/64" = 1' scale present less of a display problem than those built on a more generous scale.

OFFICE DE PUBLICITE S.A. - 16 Rue Marcq, Brussels 1, Belgium; Subscriber to the Journal.

JAMES W. PARKER - 410 Glengarry Avenue, Toronto 12, Ontario, Canada: writes that he is a model builder interested in sailing models of schooners and small sailing vessels. He is presently working on a radio-controlled air-sea rescue craft and a model of the Norwegian freighter PATEKE.

PINKUS & CO., - Froschaugasse 7, Postfach, Zurich 25, Switzerland: Subscriber.

HOWARD M. THOMAS - 275 Belmont Court West, North Tonawanda, New York: describes himself as a student ship modeler. His experience began in the mid-30's when he built and raced 40-800's in Cleveland, Ohio. During the war, he built some display and training models, and he is presently picking up where he left off some time ago. Mr. Thomas would like to meet others in his area with similar interests.

JOHN M. TURNBULL - 116 North Sunset Drive, Ithaca, New York: informs us he is interested in naval armament. He is a model builder and likes sailing craft.

TWO CONTINENTS COMMODITY CORP. - Dept. C., 151 W. 18th Street, New York 11, New York: another subscriber to the Journal.

CHANGES OF ADDRESS

GALE BLOSSER - 225 Castenada Drive, Millbrae, California.
LT. COL. LEWIS C. BRITTON - 5539 Overdale Drive, Los Angeles 43, California
GEORGE B. CADWELL, JR. - 1350 Via San Juan, San Lorenzo, California.
ARNE CHRISTENSEN - Aagaarden, Randers, Denmark.
JOHN J. FLYNN - 6809 North Greenview Avenue, Chicago 26, Illinois.
ROY A. FRYE - 715 South Cedar Avenue, Roswell, New Mexico.
CAPTAIN CARL G. GENTER - 414 Capitol Street, Vallejo, California.
LT. CMDR. BARTON M. HOLMES - 69 Princeton Avenue, New Dorp, Staten Island 6, N. Y.
M.SGT. EDWARD W. JENKINS - 6000 Installations Sqdn., APO 925, Box 127, San Francisco, California.
ARTHUR D. KEIL, JR. - 19208 - 80th Place West, Edmond, Washington.
ERWIN G. KNARR - 6214 Bluebell, North Hollywood, California.
WILLIAM E. LEE - 505 Ivy Circle, Alexandria, Virginia.
R. G. LYNCH - Rt. 1, Box 1205, Gridley, California.
JAMES V. POTTS - 21 Inglewood Drive, Toronto 7, Ontario, Canada.
JOSEPH M. SCHENKEL - Waverly Avenue, Medford, New York.
HAROLD A. UNDERHILL - "Fernleigh Cottage", Baltonsborough,Near Glastonbury, Somerset, England.
FLOYD VER VOORN - 426 Haywood Road, Ambler, Pennsylvania.
EDWARD VON DER PORTEN - 2250 Grahn Drive, Santa Rosa, California.

RESIGNATIONS.

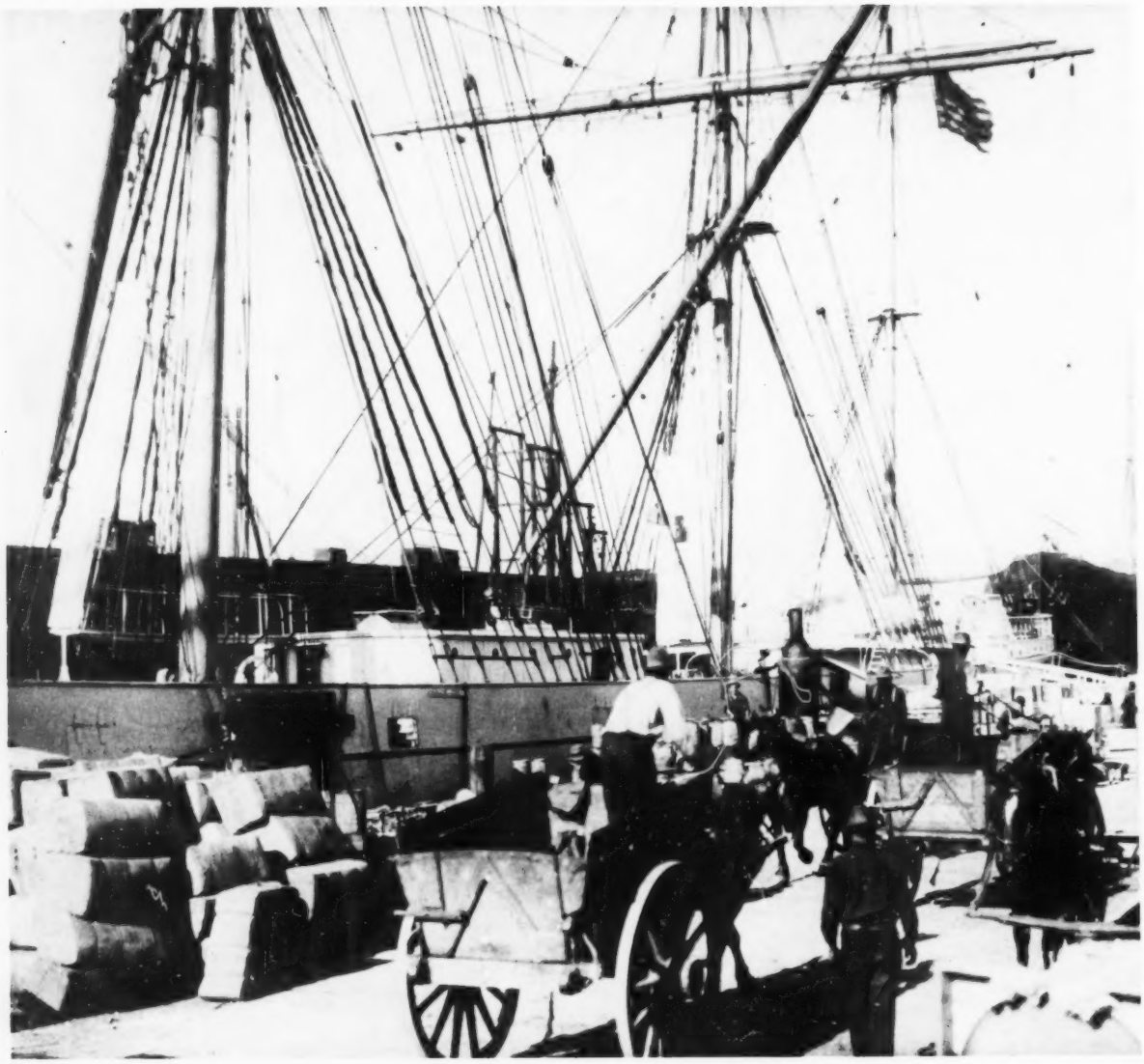
MAJOR R. G. SAUNDERS - Box 84, Cor. Queen & Mountain, Beamsville, Ontario, Canada: because of ill health during the past year and present inability to continue with his ship model research.

CAPTAIN C. T. SURRIDGE - 3900 Fairway Avenue, Oakland 5, California: because of advanced years and inability to participate in the activities of the Guild.

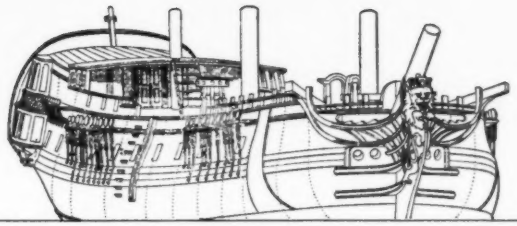
The Secretary of the Guild, on behalf of all members, wishes to thank Major Saunders and Captain Surridge for their sincere efforts in past years to support the N. R. G. and share their research findings and "know-how" with others. Their decision to retire is understandable, but regretted by all.

DECEASED

FRANK S. BUNNELL, of Stratford, Connecticut.
S. MILTON CLARK, of Upper Montclair, New Jersey.
VICE ADMIRAL E. L. COCHRANE, USN (RET.) of Boston, Massachusetts.
JEAN-HERVE GUERMONPREZ, of Paris, France.



Four-masted bark ASTRAL at San Francisco, where she arrived September 16, 1910, 154 days from New York. She lost her topgallant masts off Cape Horn and completed the passage under jury rig. This photograph shows her discharging cargo. Notice the donkey engine on the wharf, the use of the lower yards as cargo booms, and the position of the flying bridge, lifted to clear the hatches.



VOLUME 11, NO.1 THE NAUTICAL RESEARCH JOURNAL SPRING, 1960

According to the title page of the catalog, the model collection at the Science Museum (London) is arranged to show the "history and development" of the sailing ship. That is, the exhibits - the models, prints, plans, and photographs - are arranged in chronological order, "with the object of showing the developments in structure and form which have taken place during the ages, together with the mechanical improvements which each century has been able to add to masts and rigging...." This is what all technological museums concerned with shipping strive to do. They want their collections to portray the successive steps in shipbuilding produced by man's attempt to better himself.

No marine collection is ever complete. Through the years, the model collection at the Science Museum has been built up so that "in comprehensiveness and also in the variety of types illustrated, (it) now exceeds any other such collection in the Empire." Yet the Museum does not feel that it has a sufficient number of models: "For the latter part of the history of the sailing ship these collections are now reasonably complete, but for the earlier periods, prior to the middle of the seventeenth century, more models are required, but these can only be produced as the result of laborious research." Thus a visitor to the Museum (or a user of the catalog and handbook) will find that lack of information has prevented certain periods from being as fully represented as some others. But nowhere do the publications state that any type of vessel has been deliberately omitted because it had no importance in the development of the ship.

Some historians and writers, both professional and otherwise, do not appear to understand this point.

In referring to these "imperfections of the record", the compilers of the catalog write: "In the past there has been a tendency to disguise, or at any rate to slur over, the many gaps which exist in our knowledge of the development of ships, and in consequence it seems desirable to indicate from the very outset, how capricious have been the survivals of exact facts and how large are the lacunae." They then proceed to describe the many areas which remain more or less a mystery today.

But if there is no longer a tendency to disguise the flimsy evidence supporting some of our beliefs on maritime history, we are being subjected to another device which is no more desirable. In recent years, an increasing number of writers have shown their unwillingness to accept the fact that all types of craft, all through the ages, were the origin of the ship in its final form. Over the centuries, better designs and better built craft rep'aced earlier ones, while changing conditions ended the need for others. Nevertheless, whether they served for a century or for only a decade, each of these designs was one more step in man's fight to harness the wind and the sea. No type of sailing ship ever sprang into existence full blown.

Yet some historians would prefer to ignore these hundreds of craft and their places in the evolution of the ship. They have chosen, instead, to adopt an artificial and arbitrary standard. In effect, all vessels that don't conform to their

criteria are rejected as lacking historical importance, if worthy of any consideration. Their theory, put in its simplest form, is that a ship to be worth studying must have one characteristic: speed.

Because of this distorted principle, now in general circulation, certain terms and phrases have displaced normal research. The first clipper ship; the culmination of all ship designs; fine-lined hull; lofty sail plan - these hazy expressions have become a necessary part of the vocabularies of marine writers of this generation. This exaggerated emphasis on speed has reached the point where listings of record passages are substituted for marine archeology. Out of it has grown a legend - cherished by some - that wooden shipbuilding really ended in America at the outbreak of the Civil War. It has also caused the Maine-built Cape Horners, the efficient coasting schooners - that survived right down to the second World War, the dozens of local types that provided a livelihood for generations of coastal folks, it has caused all these to be dismissed with an impatient apology. Oh, these vessels have not gone entirely unnoticed, but they are acknowledged as one must acknowledge a poor relation who hasn't the decency to hide himself when company comes.

It is doubtful whether any man's position in maritime history is more secure than Captain James Cook's. After Cook returned to England from his first voyage in the Pacific, the Admiralty soon realized that further exploration was advisable. The ENDEAVOUR BARK, a Whitby collier, had proven so successful in this business that two similar ones were purchased for the second voyage. Joseph Banks, who was slated to accompany Cook again, was not satisfied with these small barks and attempted to persuade the Admiralty to substitute a forty-gun ship. Cook was dismayed at this. The new collier, the RESOLUTION, he said, "was the ship of my choice and .... I think the properest ship for the service she is intended for any I ever saw." Common sense at last prevailed, and Cook had the ship of his choice. While ideal for exploration, the RESOLUTION rarely made more than seven or eight knots. Seven or eight knots! Would today's hasty historian bother with such a slow coach?

-Roy Rogers, Editor

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AMERICAN OIL SHIPS

THE BARKS ACME, ASTRAL, AND ATLAS

BY FRANK W. THOBER

CONCLUSION

In the previous articles in this series I have tried to give a complete account of the careers of the four-masted barks ASTRAL, ACME, and ATLAS during the years when they were owned and operated by the Standard Oil Company. This article - the last - contains corrections of errors in two of the earlier articles, a summary of the ships' voyages, the lines and sail plan of the ACME, and a list of sources from which I obtained useful information.

Part 1 of this series (Nautical Research Journal, Vol. 8, No. 1) contains three typographical errors which distort the sense of the text:-

Page 3 - The words in parentheses preceeded by an asterisk following the first paragraph on this page were intended as a footnote on page 2. The exception of barkentines built during and after World War I refers to the statement that the Standard Oil ships and the WILLIAM P. FRYE were the last deep water square-rigged ships built in the United States.

Page 4 - The last two sentences in the second paragraph under the heading "Far Eastern Passages and Weather" should read as follows:

> During the early years of the twentieth century, ships leaving eastern United States ports for Japan during the months from May to November averaged over 160 days, while those leaving during the months from December to April averaged about 135 days. Similar differences are found in passages to other Far Eastern countries.

Page 6 - The sentence "All her standing rigging was unusual" in the fifth line of the second full paragraph is incorrect. It should read:

> All her standing rigging was steel wire rope set up with rigging screws. The arrangement of her standing rigging was unusual.

ACME and ATLAS in the East, 1904-1905

The sequence of events following the death of Captain Lawrence of the ACME in December, 1904, as described in Parts 2 and 3 of these articles (Nautical Research Journal, Vol. 9, No. 2, page 35, and No. 5 & 6, page 138) is not entirely correct. Since those were written, I have been in touch with Captain Palmer F. Tubbs of New London, Conn., who was a member of the crew of the ACME during that voyage. The information obtained from him, supplemented by data gleaned from the National Archives by John Lyman, has enabled me to piece together what is almost certainly the correct story. There follows a brief summary of the events under discussion as they appeared in the previous articles:

The ACME arrived at Hiogo in August, 1904, and on December 6, Captain Lawrence committed suicide. Two days later the ship sailed for Hong Kong and arrived on December 19. I stated that she was commanded by Captain Amesbury, formerly her mate, but this was incorrect. The ATLAS was at Shanghai at the time, and the two ships

exchange masters, Amesbury taking the ATLAS and McKay the ACME. On January 23, 1905, Amesbury shot himself and was succeeded by the former mate of the ATLAS, John C. Amberman.

Some of this is based on sound sources, but not all of it. Captain Lawrence unquestionably died as reported, but that it was suicide was based on statements by Captain McKay's son and Captain Amberman. Mr. McKay was a young child in 1904, and Amberman was over 90 years old and very uncertain in his memory when he told the story, and neither was in the ACME at the time of the death. After Lawrence's death, the New York Maritime Register listed Amesbury as master of the ACME; that he had been her mate was speculation, based on the assumption that it would have been almost impossible to find a qualified American shipmaster anywhere else in Hiogo on two days' notice. But speculations and assumptions can be wrong, as in this case. It is correct that Amesbury was master of the ATLAS and committed suicide on her, as these facts are recorded in her log.

The information supplied by Captain Tubbs and Mr. Lyman leaves only one doubtful point. Captain Tubbs confirms Lawrence's death on December 6th, but attributes it to diabetes, not suicide, and I see no reason to doubt that he is correct. He says the ship was taken across to China by Captain Leonard C. Dart of the British oil ship ALCIDES, and that Dart left the ACME at Hong Kong and returned to his own ship. The register of the ACME lists Kenneth McClellan as master on this passage; he was her mate on the outward passage. A possible explanation of this is that Dart may have been acting master, but not being an American citizen, could not be officially in command. He later became a citizen and commanded the ACME for a brief period and the ATLAS for almost two years.

After her arrival at Hong Kong, command of the ACME was taken by McKay, and he was succeeded in the ATLAS by Stanley Amesbury. After the death of the latter, his place was taken by John C. Amberman, who had been mate on the outward passage. I have been unable to get any information about Amesbury. He had not been an officer on either ship, but may have come from some other Standard Oil vessel. The Amesburys were a prominent Maine seafaring family, but I have found no other references to a Stanley Amesbury.

Summary of Passages - ASTRAL

Sailed		Arrived		Days
Bath	Jan. 6, 01	New York	Jan. 8, 01	2
New York	Feb. 8, 01	Shanghai	June 16, 01	128
Shanghai	July 19, 01	San Francisco	Aug. 30, 01	43
San Francisco	Nov. 10, 01	New York	Mar. 13, 02	123
New York	May 17, 02	Hong Kong	Sep. 12, 02	118
Hong Kong	Oct. 18, 02	Sourabaya	Nov. 28, 02	41
Sourabaya	Dec. 19, 02	Del. Bkwr.	June 5, 03	168
Philadelphia	July 10, 03	New York	July 10, 03	-
New York	Aug. 1, 03	Baltimore	Aug. 4, 03	3
Hampton Roads	Aug. 27, 03	San Francisco	Jan. 18, 04	144
San Francisco	Feb. 27, 04	Honolulu	Mar. 23, 04	25
Honolulu	Apr. 23, 04	Philadelphia	Sep. 3, 04	133
Philadelphia	Oct. 6, 04	Hiogo	Mar. 30, 05	175
Hiogo	May 18, 05	San Francisco	June 28, 05	42
San Francisco	Aug. 6, 05	New York	Dec. 31, 05	147
New York	Feb. 2, 06	Yokkaichi	June 16, 06	134
Yokkaichi	July 6, 06	Honolulu	Aug. 6, 06	32
Honolulu	Sep. 6, 06	San Francisco	Sep. 26, 06	20

Summary of Passages - ASTRAL (Cont'd.)

Sailed		Arrived		Days
San Francisco	Nov. 16, 06	Yokkaichi	Jan. 15, 07	59
Yokkaichi	Feb. 13, 07	Honolulu	Mar. 13, 07	29
Honolulu	Apr. 13, 07	Del.Bkwr.	Aug. 13, 07	122
Philadelphia	Aug. 31, 07	Norfolk	Sep. 8, 07	8
Norfolk	Oct. 8, 07	Honolulu	Feb. 10, 08	125
Honolulu	Mar. 21, 08	Hilo	Mar. 23, 08	2
Hilo	Apr. 6, 08	Del. Bkwr.	Aug. 31, 08	147
Philadelphia	Sep. 22, 08	Baltimore	Sep. 24, 08	2
Cape Henry	Oct. 1, 08	*New York	Oct. 15, 08	14

*Severely damaged in hurricane. Put in to New York for repairs.

New York	Nov. 28, 08	San Francisco	May 6, 09	159
San Francisco	Sep. 18, 09	New York	Jan. 18, 10	122
New York	Apr. 15, 10	San Francisco	Sep. 16, 10	154

Summary of Passages - ACME

Sailed		Arrived		Days
Bath	July 1, 01	New York	July 3, 01	2
New York	Aug. 1, 01	Yokohama	Feb. 21, 02	204
Yokohama	Mar. 19, 02	Honolulu	Apr. 16, 02	29
Honolulu	June 6, 02	Del. Bkwr.	Oct. 26, 02	142
Philadelphia	Dec. 4, 02	Hiogo	Apr. 28, 03	145
Hiogo	May 14, 03	Honolulu	June 9, 03	27
Honolulu	July 14, 03	Del. Bkwr.	Dec. 4, 03	143
Del. Bkwr.	Dec. 7, 03	New York	Dec. 9, 03	2
New York	Jan. 24, 04	Yokohama	June 27, 04	155
Yokohama	Aug. 23, 04	Hiogo	Aug. 25, 04	3
Hiogo	Dec. 8, 04	Hong Kong	Dec. 19, 04	11
Hong Kong	Jan. 1, 05	Baltimore	Apr. 24, 05	113
Baltimore	Apr. 28, 05	New York	May 2, 05	4
New York	June 2, 05	Baltimore	June 4, 05	2
Cape Henry	June 22, 05	*Manila	Oct. 24, 05	124

*Grounded in Straits of Sunda, Sept. 10; refloated Sept. 16 and towed to Tandjong Priok. Left there in tow for Manila, Oct. 13.

Manila	Nov. 26, 05	*Singapore	Dec. 5, 05	9

*Towed to Singapore for repairs.

Singapore	Feb. 21, 05	Honolulu	May 12, 06	81
Honolulu	June 9, 06	Del. Bkwr.	Sep. 28, 06	111
Del. Bkwr.	Nov. 15, 06	Hakodate	Apr. 6, 07	142
Hakodate	May 5, 07	San Francisco	June 1, 07	28
San Francisco	Aug. 2, 07	Hiogo	Sep. 24, 07	52
Hiogo	Oct. 25, 07	Astoria	Nov. 26, 07	33
Astoria	Apr. 20, 08	New York	Aug. 9, 08	111
New York	Oct. 6, 08	Newport News	Oct. 8, 08	2
Cape Henry	Oct. 30, 08	San Francisco	Mar. 23, 09	144
San Francisco	June 17, 09	New York	Oct. 23, 09	128
New York	Nov. 16, 09	Philadelphia	Nov. 18, 09	2
Del. Bkwr.	Dec. 16, 09	San Diego	Apr. 22, 10	127

Summary of Passages - ACME (Cont'd.)

Sailed		Arrived		Days
San Diego	Apr. 29, 10	San Francisco	May 3, 10	4
San Francisco	June 16, 10	New York	Oct. 19, 10	125
New York	Nov. 6, 10	Philadelphia	Nov. 7, 10	1
Philadelphia	Nov. 24, 10	Baltimore	Nov. 27, 10	3
Cape Henry	Dec. 14, 10	San Francisco	May 6, 11	143
San Francisco	July 2, 11	Tacoma	July 7, 11	5
Tacoma	Oct. 3, 11	New York	Mar. 4, 12	153
New York	Mar. 17, 12	Bath	Mar. 21, 12	4
Bath	-	New York	May 3, 12	-
New York	June 7, 12	Baltimore	June 9, 12	2
Cape Henry	June 20, 12	*Seattle	Mar. 4, 13	259

*Cargo heated; at Montevideo Sept. 5 to Nov. 6, 198 days net sailing time.

Summary of Passages - ATLAS

Sailed		Arrived		Days
Bath	Feb. 16, 02	New York	Feb. 24, 02	8
New York	Mar. 23, 02	Hong Kong	July 14, 02	113
Hong Kong	Nov. 2, 02	Baltimore	Feb. 3, 03	93
Baltimore	Feb. 13, 03	New York	Feb. 22, 03	9
New York	Apr. 1, 03	Yokohama	July 23, 03	113
Yokohama	Sep. 6, 03	Manila	Sep. 26, 03	20
Manila	Nov. 22, 03	*London	Apr. 2, 04	132

*At St. Helena Feb. 11-14, 130 days net sailing time.

London	Apr. 21, 04	New York	May 25, 04	34
New York	July 17, 04	Shanghai	Dec. 7, 04	143
Shanghai	Mar. 5, 05	San Francisco	Apr. 9, 05	36
San Francisco	May 28, 05	New York	Nov. 3, 05	159
New York	Dec. 31, 05	Yokohama	May 31, 06	151
Yokohama	June 19, 06	Honolulu	July 15, 06	27
Honolulu	Aug. 12, 06	*Del. Bkwr.	Jan. 12, 07	153

*At Valparaiso Oct. 16-20, 149 days net sailing time.

Philadelphia	Feb. 18, 07	Baltimore	Feb. 20, 07	2
Cape Henry	Mar. 26, 07	*San Francisco	Dec. 24, 07	273

*Collided with the VIKING, June 5 off Cape Horn.
At Rio de Janeiro July 3 - Aug. 26, 219 days net sailing time.

San Francisco	Mar. 14, 08	Kahului	Mar. 26, 08	12
Kahului	Apr. 9, 08	Philadelphia	July 26, 08	108
Philadelphia	Aug. 2, 08	New York	Aug. 3, 08	1
New York	Oct. 4, 08	Yokohama	Feb. 22, 09	141
Yokohama	June 22, 09	Manila	July 20, 09	28
Manila	Sep. 21, 09	New York	Mar. 6, 10	166
New York	Apr. 21, 10	Philadelphia	Apr. 22, 10	1
Philadelphia	May 11, 10	Seattle	Sep. 27, 10	139
Seattle	Oct. 17, 10	San Francisco	Oct. 21, 10	4

Sources of Information Used in These Articles

To avoid overloading the text with a multitude of footnotes, I have, with a few exceptions, made no references to the sources of information used in preparing these articles. Instead, I shall give here a list of these sources with a brief description of what was obtained from each.

"New York Maritime Register" - The weekly reports of ship movements in this periodical furnished the basic outlines of the careers of the ships, including dates of departure and arrival, masters' names, reports on casualties, and other miscellaneous items. This information is generally quite complete and accurate, the exceptions being a few missing or incorrect dates, and a tendency to be late in reporting changes of masters. Also obtained from this source were most of the movements of other vessels mentioned.

Log Books - The San Francisco Maritime Museum was kind enough to lend me the original logs covering a substantial portion of the service of the ships while owned by Standard Oil. These included the following periods:

ASTRAL	-	Feb. 2, 1901	through	Sept. 12, 1902
		Jan.13, 1904	"	Feb. 8, 1908
		Apr. 6, 1908	"	Oct. 15, 1908
ACME	-	Sept. 2,1906	"	Sept. 29, 1906
		June 2,1908	"	Mar. 29, 1913
ATLAS	-	Feb. 16,1902	"	Jan. 20, 1904
		Aug. 21,1904	"	Feb. 16, 1905
		Feb. 12,1906	"	June 19, 1907
		Feb. 6,1909	"	Oct. 18, 1910

These served to supplement and correct the "New York Maritime Register" and give what I believe to be a complete and correct record of all the movements of the ships. In addition, they give a great deal of detail about the voyages, the performance of the ships, and their never-ending problems with their crews.

Mrs. McKay's Diaries - Through the kindness of Captain McKay's son Daniel and Harold D. Huycke, I was able to obtain copies of diaries kept by Mrs. McKay on the ATLAS's second voyage and the ACME's fourth. Mrs. McKay had a considerable knowledge of and interest in ships, as well as the people in them; moreover she could write very well. As a result her diaries give an excellent picture of life on twentieth century sailing vessels as seen from the after end, and supply a great deal of useful data on these two voyages.

"Shipping Illustrated" - January 4 and 11, 1908 - This gives an account of the ATLAS - VIKING collision.

"San Francisco Chronicle" - June 18, 1908 - This gives a lurid, but generally accurate account of the ATLAS's trouble in the Orient during her third voyage.

"Sea Breezes" - There are numerous references to these ships which added some useful information.

"American Neptune" - Harold D. Huycke's articles on the ACME ("The American Four-Mast Bark STAR OF POLAND, ex ACME" Vol. VIII, p. 279) and the

ATLAS ("Case Oil and Canned Salmon: STAR OF LAPLAND, ex ATLAS" Vol. XVI, p. 5 and 107) and his notes on the wartime voyages of the STAR OF LAPLAND (Vol. XIV, p. 210) furnish much useful data. A brief mention of the ATLAS - VIKING collision by Gershom Bradford in his "Mary Celeste No - Not Again!" (Vol. X, p. 200) set me on the way toward getting the full story of that incident.

"Sewall Ships of Steel" by Mark Hennessy - This book contains numerous useful references to the Standard Oil ships, although no attempt is made to give a full connected history of them.

"The Down Easters" and "Coolie Ships and Oil Sailers" by Basil Lubbock -

These give a brief and sketchy account of the ships.

"American Merchant Ships" by F. C. Matthews - This is confined mainly to wooden vessels, but there are several references to the Standard Oil ships. Much of the information on Captain Lawrence before he joined the ACME is from these books.

"Last Survivors in Sail" by John Anderson
"Last of the Square-Rigged Ships" by J. Ferrell Colton

These two books contain a small amount of information, most of which appears to have been taken from Lubbock.

"Lloyd's Register of Shipping"
"Merchant Vessels of the United States"
"Record of American and Foreign Shipping"

The various volumes of these registers supplied details such as dimensions, tonnage, and information on docking and repairs, and helped somewhat in clearing up the vexing problem of the succession of masters on the ACME and ATLAS.

I should like to extend my sincere thanks to the following individuals and organizations, without whose help I could not have produced anything worth publishing:

Harold D. Huycke of Seattle, Wash., who allowed me free access to his large collection of material on these ships. This included, among other things, Mrs. McKay's diaries, numerous photographs, a letter from F. M. Fairbanks who served in the ATLAS and gives a detailed account of the mutiny at Yokohama, letters from Harry Sheehan describing in great detail the ATLAS's 1905 passage from San Francisco to New York, a letter from P. Muller with reminiscenses of a voyage on the KENTMERE under Captain Amberman, a letter from R. D. S. Eckford that helped clear up the question of how Captain Amberman got from the TAMAR to the ATLAS, and other items too numerous to mention here. Mr. Huycke and I have carried on an extensive correspondence for more than three years in an effort to clear up the many doubtful points in the history of these ships, especially the question of the captains of the ACME and the ATLAS.

Captain Thomas W. Sheridan of Little Neck, N. Y., who was an officer on the ACME in 1907-09 and gave some useful data on her voyages during that time, as well as lending the photographs of the ship and her crew at Hiogo.

Andrew J. Nesdall of Boston, Mass., who made a valiant effort to get some usable information from the aged Captain Amberman, and who loaned the photographs of the ACME at Bath and Montevideo.

Clarence N. Rogers of San Bernardino, Cal., who gave some information about Cap-

tain Amberman's later years as a shipmaster.

John Lyman of Washington, D. C., who dug out much useful data from the National Archives in Washington.

E. B. Howard of Barry, Wales, who sent me an excellent description of the arrangement of the decks and quarters of the ATLAS's sister ship WILLIAM P. FRYE.

W. Z. Gardner, editor of the Esso Shipping Company's "Ships' Bulletin", who furnished some data he obtained from the Socony Mobil Oil Co. This was the only material of any sort I was able to obtain from any of the successors to the old Standard Oil Company, in spite of several efforts to do so.

The American Petroleum Institute, New York, for statistics on exports of petroleum.

The San Francisco Maritime Museum and its director, Karl Kortum, for the loan of the log books and some photographs.

Townsend J. Smith of Rumson, N. J., for the loan of a body plan and table of offsets used in making the lines drawing.

The Mariners' Museum, Newport News, Va., for copies of the sail plans of the ASTRAL and ACME.

Arthur O. Eppler and Morton-Waters Company of San Francisco, the San Diego Historical Society, the Douglas Photo Shop of Bath,and the Nautical Photo Agency of Beccles, England, for photographs.

Miss Blanche Kuster of Tarrytown, N.Y., for her assistance in digging out material at the New York Public Library and for a fine job of translating my handwritten manuscripts into legible typed copies.

Sail Plan and Lines

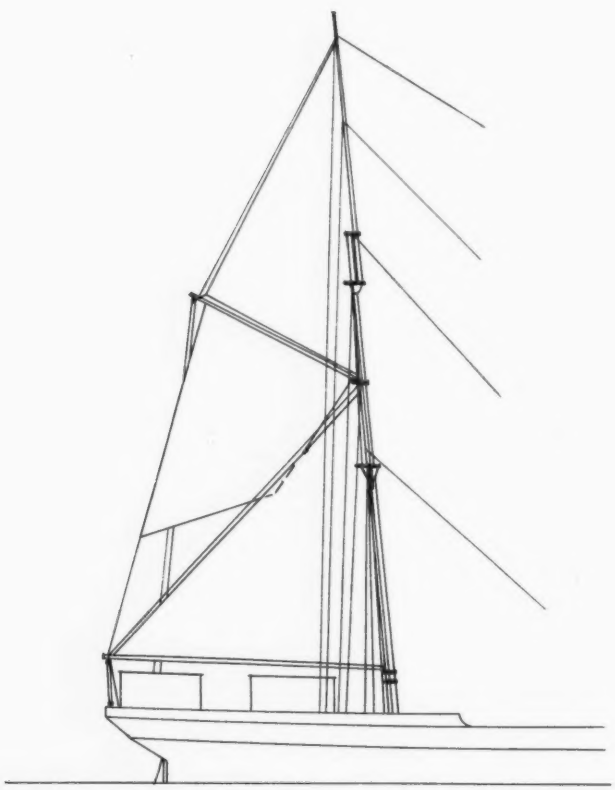
Copies of the sail and spar plans of the ASTRAL and ACME to a scale of 1/8" = 1 foot, were obtained from the Mariners' Museum at Newport News. They appear to be the original builder's plans or copies of them. The plan of the ASTRAL has two dates: December, 1900, and October, 1907; that of the ACME is dated February, 1901. A reduced copy of the latter was printed in "Marine Engineering", January, 1904. It is captioned "Sail Plan of the Four-Masted Shipentine ASTRAL" although the rig of the jiggermast clearly shows it to be the ACME, and the name ACME is plainly legible on the bow. The spar dimensions given by Hennessy in "Sewall Ships of Steel", page 30, agree with those on the plans after making allowance for the fact that the plans do not include the yardarms in the lengths of the yards.

The sail plan of the ACME that accompanies this article was based primarily on the plan mentioned above. As this plan does not have much detail, considerable use was made of photographs of the ships to fill in the missing information. Some problems arose that could not be solved from either the plans or photographs. In these instances I followed the usual practice of the period, depending mainly on Underhill's "Deep Water Sail" and "Sailing Ship Rigs and Rigging", and to a lesser extent on photographs of other contemporary vessels, especially those of the PARMA in Villiers's "Last of the Wind Ships".

For the lines, I obtained from Townsend J. Smith of Rumson, N. J., a blueprint

of the body plan to a scale of 1/4" = 1 foot, and a table of offsets. The drawing is signed by H. C. Towle and is undated. The offsets appear to have been taken from measurements of one of the hulls, as they contain slight irregularities apparently resulting from the lapping of the shell plating. To produce a complete set of lines it was necessary to redraw the entire plan, using the offsets and body plan as a guide. Some slight liberties had to be taken in order to fair the lines properly. The stern, from about 15 feet forward of the sternpost, was entirely redrawn based on the offsets. The lines shown on the blueprint for that part of the hull bear little resemblance to the ships as built.

The lines may properly be said to represent the hulls of all three vessels, as they were practically identical up to the deck line. The sail plan of the ACME was chosen because I had more information and better photographs of her than of the other two ships. The differences among the three were described in some detail in Part 1 of this series of articles. Due to its somewhat unusual arrangement, I have also included a drawing of the ASTRAL's jiggermast, drawn from her sail plan.



JIGGERMAST OF THE ASTRAL. THIS WAS STEPPED 3-1/2 FEET FARTHER AFT THAN THE JIGGERMAST OF THE OTHER TWO SHIPS.

QUESTIONS AND ANSWERS

The purpose of this section is to provide a means of obtaining and exchanging information which is not generally accessible. Correspondents who send their answers directly to the inquirer are urged to send copies to the Journal, so that the information can be made available to others.

QUESTIONS:

(11-1-1) Plans drawn by Davis: I should like to know if anyone now handles the many plans formerly offered by the late Charles G. Davis.

-Lloyd E. Manley

(11-1-2) Collins Line steamers: I shall appreciate any help in locating detailed plans of the paddle steamers ATLANTIC, ARCTIC, BALTIC, PACIFIC, and ADRIATIC.

-Michael Derr

(11-1-3) Barkentine FERREIRA (c. 1900): Where can I obtain the correct mast and spar dimensions of the famous clipper CUTTY SARK for the period when she was the Portuguese barkentine FERREIRA?

-Max L. O'Starr

(11-1-4) Fighting bolt: I have heard the term "fighting bolt" used in descriptions of carronades. Can anyone further describe this bolt and explain its purpose?

-Leopold Prince

(11-1-5) Origin of the schooner in America: I should like to know of any evidence, either printed or pictorial, that shows that the schooner was introduced at New Amsterdam by the Dutch, after having been invented in Europe.

-James S. Ferguson

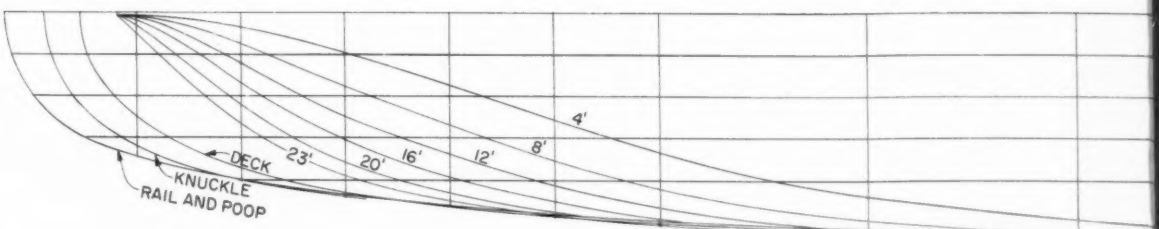
(11-1-6) "The Shipmodeler" magazine: Does any reader know where I may borrow a copy of the May, 1929 issue of "The Shipmodeler", which describes and illustrates models of the 18th century bomb ketches made by H. Percy Ashley?

-L. T. Herndon, Jr.

ANSWERS:

(10-4-1) Skysails, moonsails, etc.: There was nothing special about skysails. In the clippers they were generally rigged standing and were just like a standing royal. When first introduced - early in the 19th century - they were set flying.

Moonsails: If they were ever actually carried I suspect they were set flying over a standing skysail.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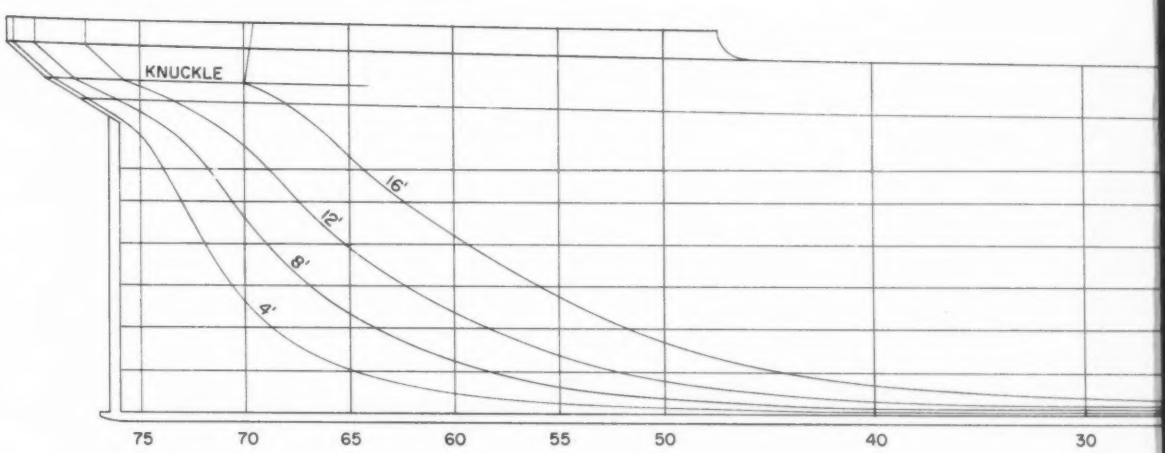
RAIL AND POOP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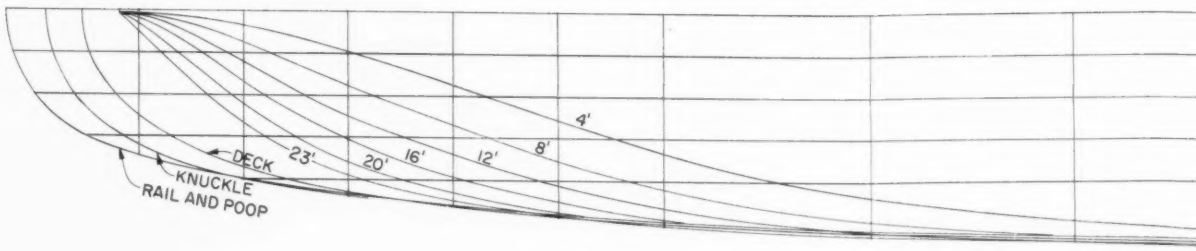
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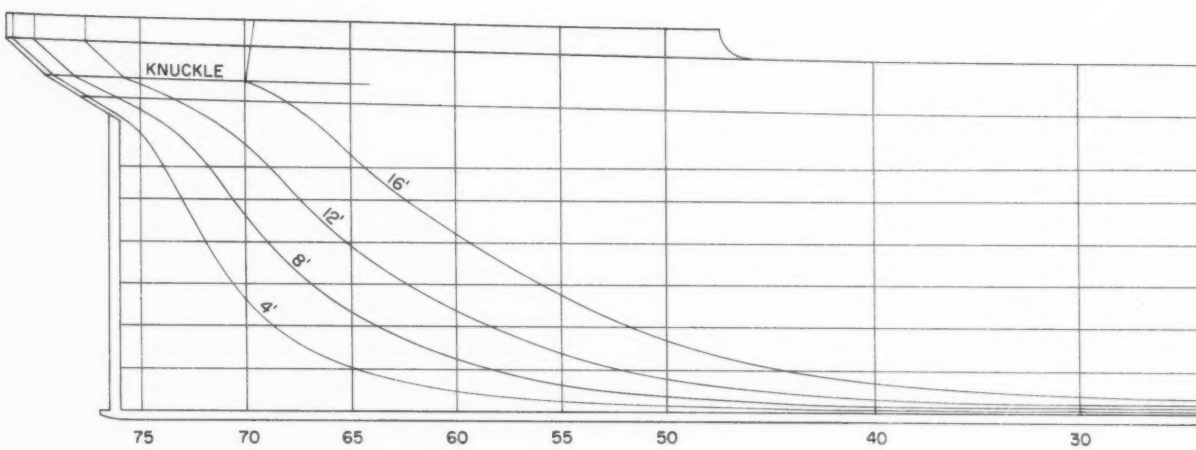
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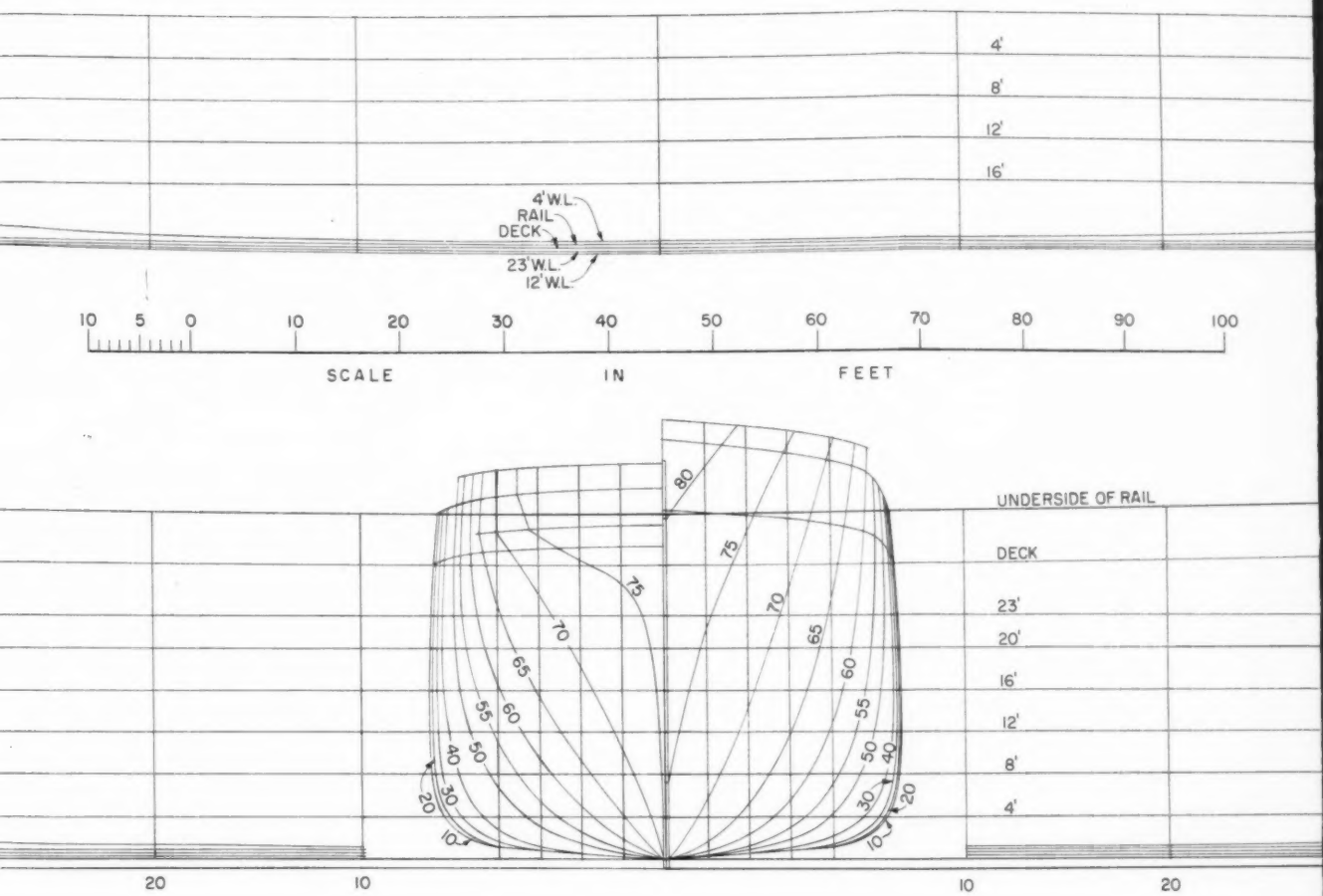
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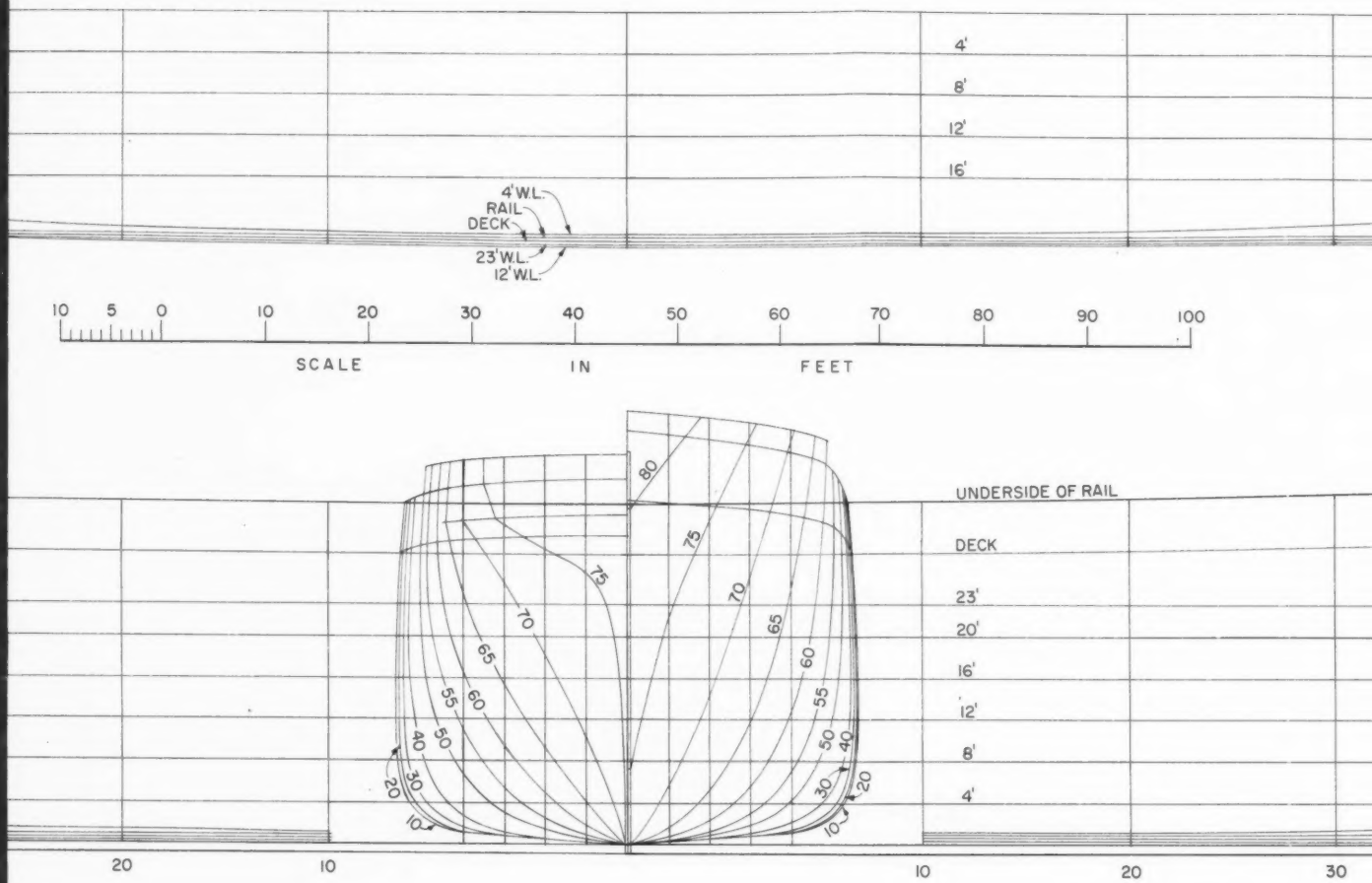
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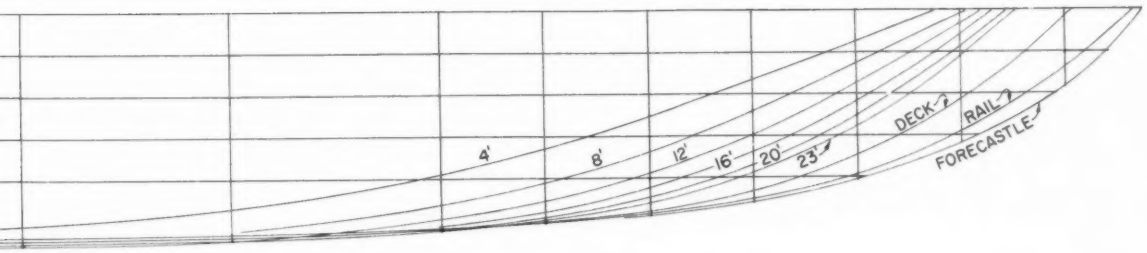
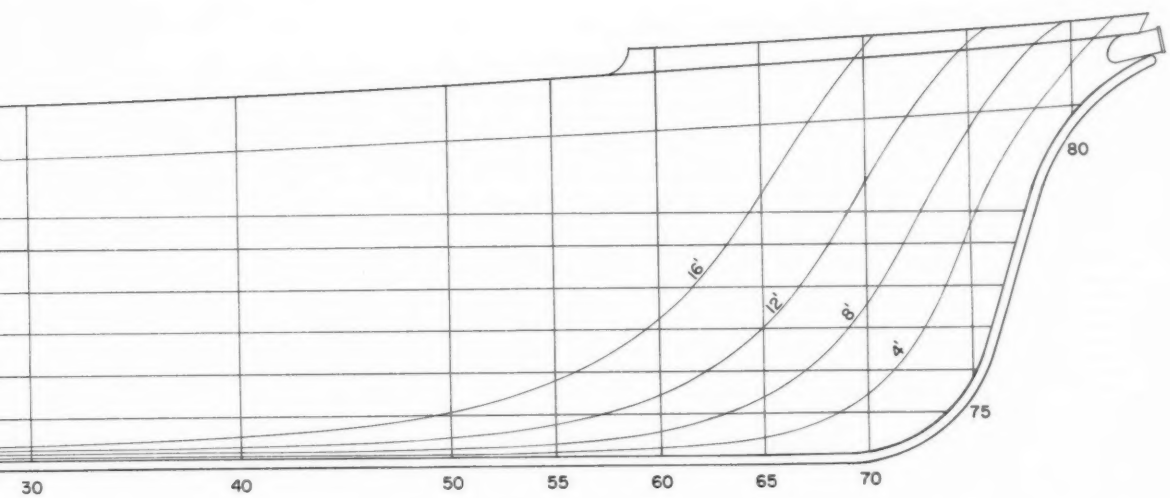




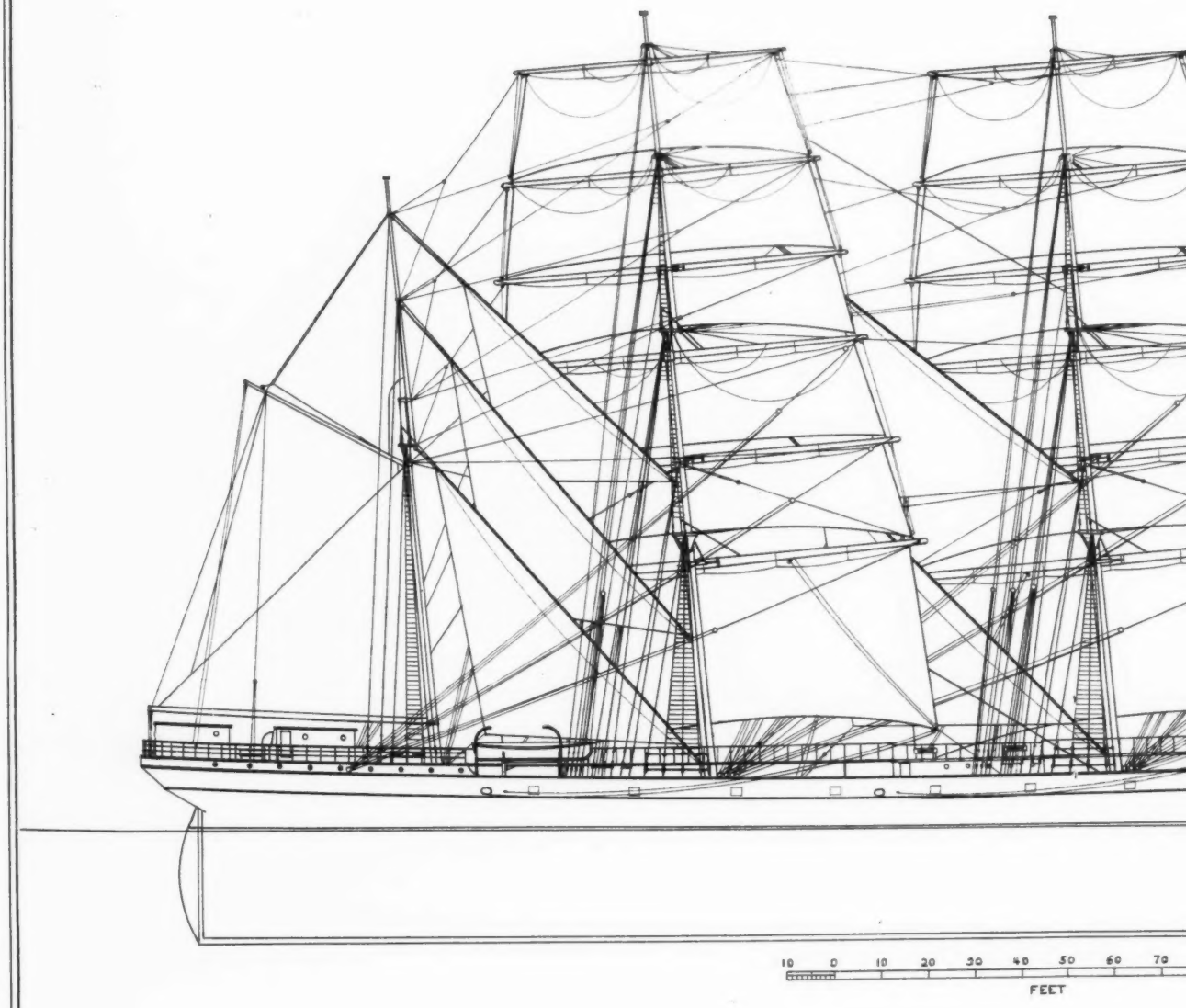
LINES OF THE

BARKS ACME, ASTRAL, & ATLAS

BUILT BY ARTHUR SEWALL & CO.
BATH, MAINE 1901

DRAWN BY F. W. THOBER

THE NAUTICAL RESEARCH JOURNAL
VOLUME II, NO. I SPRING, 1960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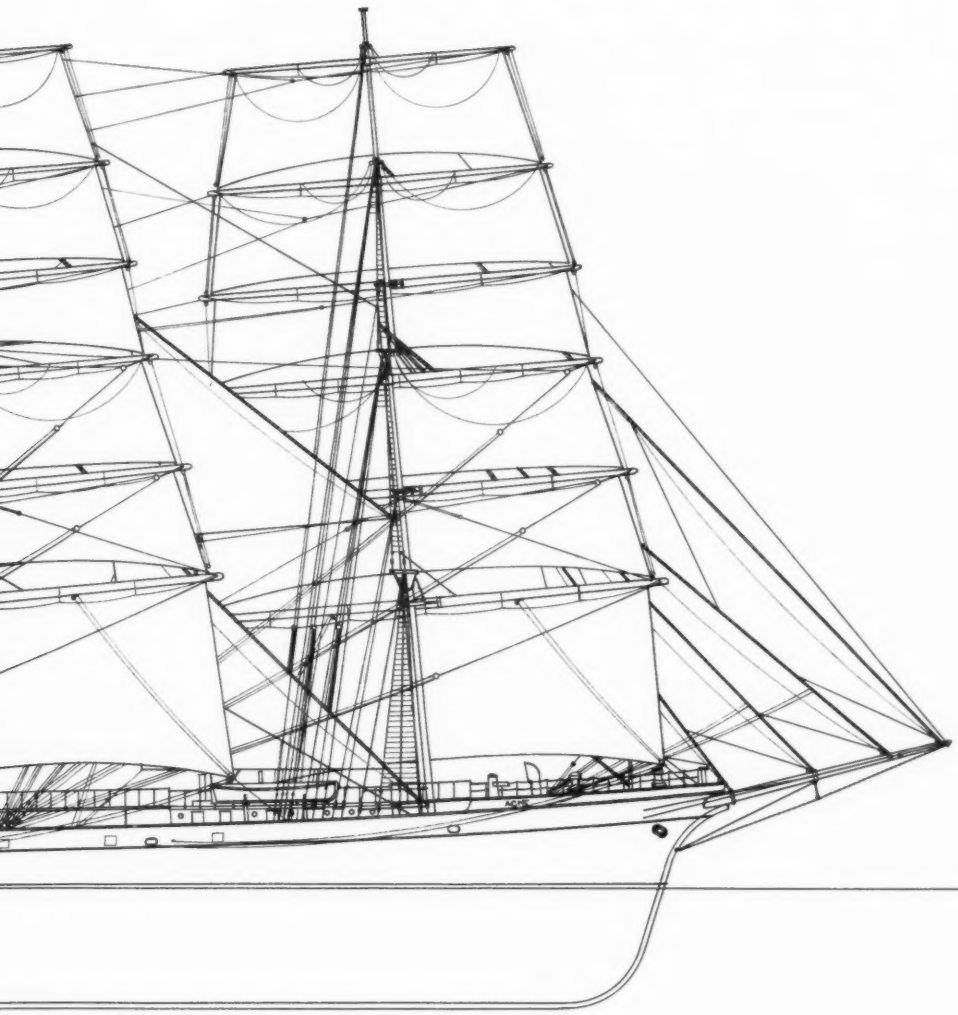

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SAIL PLAN OF THE

FOUR-MASTED BARK ACME

BUILT BY ARTHUR SEWALL & CO.
BATH, MAINE 1901

DRAWN BY F. W. THOBER

THE NAUTICAL RESEARCH JOURNAL
VOLUME 11, NO.1 SPRING, 1960

Star scrapers: I have never heard of these. Sky scrapers were sails in the shape of a right triangle. This sail was made in two parts in order that the royal could be clewed down when the sky scraper halyards were let go, which would not have been possible had the sail been in one piece extending over the royal stay. The foot of each half was about half the hounded length of the royal yard, and its clews, or lower corners, lashed to the royal yard; the peak was hoisted by the signal halyards to the truck. They were carried in the late 18th and early 19th centuries, in ships which had long enough royal poles to make it worthwhile and where, a little later, a skysail would have been used instead.

Perhaps the term "star scraper" may have been used as "flying kite" was to designate any light and lofty sail. I remember a chanty of clipper ship days which contains the line: "In a star-scraping clipper, that's a queen of the sea."

Jib-of-jib: It was precisely like a flying jib except that it was hoisted to the fore royal instead of to the fore topgallant masthead, and was set on a jib-of-jib boom that projected beyond the flying jib boom. The jib-of-jib boom was a separate spar. I never heard of their being used except in some U. S. men-of-war in the period of about 1815-40.

Watersail: This was a studdingsail set under a lower studdingsail and was sometimes called a save-all. It had inner and outer halyards which led through blocks on the inboard and outboard ends of the lower studdingsail boom, and its clews were lashed to another boom. A sheet leading aft traversed on a bridle on this boom. There was also an inhaul (one could say up-haul) bent to the inner end of this boom whereby it was hauled in over the bulwarks when being taken in. A weight was sometimes suspended to the boom to restrain the tendency to belly.

They were mostly used in ships with great freeboard. However, some ships-of-the-line, instead of shipping their lower studdingsail boom in a socket on the fore chains, did so in one on the channel wale (in two-deckers) or in the middle wale (in three-deckers); thus the depth of the leech of the lower studdingsail was much greater than that of the foresail. However, ships which shipped their booms in this way might ship it in the chains for carrying the studdingsail and only use the lower position when in harbor as a boat boom.

Some fore-and-aft rigged vessels carried a watersail underneath their main boom with the wind aft. This was in the shape of a trapezoid; the length of the longer base was equal to the outboard length of the main boom when it was over the side, and this base was hoisted under the boom by an inner and outer halyard. The shorter base was bent to a boom, with a sheet leading aft.

Hutchinson,"Seamanship", 1777, describes a watersail he carried on the wind in a ship-rigged privateer he commanded in the Seven Years War. A long spar (which also served to set a driver) was thrust out over the taffrail and to its after end was hoisted a fore topmast studdingsail "slung by the third". Its sheet was boarded to the taffrail. It had two tacks which led inboard through the aftermost scuppers on each side.

Ringtail: In the days of the clippers (and long before), this was a studdingsail set abaft the leech of a spanker or (more usually) the mainsail of a brig, schooner, or cutter. A boom slid in boom irons on the spanker or the main boom; the sheet of the ringtail led through a block at the after end of the ringtail boom and led in along the main boom. The head of the ringtail was bent to a yard to which the halyard was bent. This led either through a block at the peak and through another one under the jaws of the gaff, or through a sheave or cheek block at the peak of the gaff and through a block at the main or mizzen cap. The forward leech of the ringtail always overlapped the leech of the mainsail a cloth

or two, and it was always set on the lee side of the main sail, the tack leading through a block on the main boom and then in along the latter. There was an inhaul or downhaul rigged in various ways that probably will be apparent.

Save-all: A trapezoidal-shaped sail set between a squaresail yard and the foot of the sail above. Particularly carried in 18th and early 19th century cutters, where the crossjack (squaresail) yard was slung well below the lower stay and where the foot of the topsail consequently had a great roach. The foot was the same length as that of the topsail, and the save-all clews were generally lashed (no sheets) to the yardarms of the lower yard. The head was much shorter than the foot. It sometimes bent to a yard which was hoisted close up under the stay by a midship halyard. If there was no yard, a halyard on each head earing cringle led through a block vertically above on the topsail yard.

Sometimes topsail schooners combined their squaresail and save-all in one. Instead of ending in a line between the head earing cringles it extended above in a trapezoidal shape, with a yard on the resulting short head. As the squaresail was carried only when running and as it becalmed the fore staysail, the latter was lowered and its halyards hooked to a strop on the jack yard of the save-all to hoist it.

A contemporary writer said of all this class of sail that they "are carried not for the service they render but for display."

-D. L. Dennis

(10-4-3) The GENERAL ARMSTRONG: In regard to existing plans of the GENERAL ARMSTRONG, I have been unable to locate any. She was evidently a double-topsail schooner, brig, or brigantine, probably built by Noah and Adam Brown at New York about 1813 and owned by Rensselaer Havens, Thomas Formar (or Farmer), Thomas Jenkins, and other inhabitants of New York. The best-known painting by Emanuel Leutze shows her as a brig at the time of the Fayal battle, but it is reported that Capt. Reid changed her rig to that of a brigantine prior to the battle. A picture labeled "The Privateer Brig GENERAL ARMSTRONG" is given in "Some Famous Privateers of New England", by Ralph W. Eastman, privately printed by the State Street Trust Co. in Boston in 1928, copies of which can be found in some of the second-hand book stores.

According to Dawson's "Battles of the United States by Land and Sea" she left New York in September, 1814, as a brig of 246 tons with one Long Tom or 42 pdr. pivot gun and six carriage 9 pdrs. Coggleshall's "History of American Privateers" gives her the Long Tom and eighteen carriage 9 pdrs. and says that later twelve of these were taken off for a fort. A "protest" is in the hands of the Havens family, written by Capt. Reid, who denies this and claims that the 42 pdr. and six 9 pdrs. is correct. It would seem from this evidence that this is correct. The ship was probably equipped with additional ports to allow all of the guns to be used on the port or starboard side. She may have had as many as eight or nine ports to a side and two at her stern, the bow two at the catheads being spares. In one report Reid mentions cutting holes in the stern for ports during the battle which would seem to indicate that she had no stern ports.

It would seem that the ARGUS brig of 1803, which was 94'-9" between perpendiculars, 27'-4" beam, and 12'-8" hold, mounted eighteen guns and had ten ports to a side with two at the stern, and was of 299 tons according to H. I. Chapelle's list, would have been somewhat similar to the ARMSTRONG. In "Holdfast Gaines", a historical novel of the Revolution and 1812, by Odell and Willard Shepard, the authors give dimensions as 78' long, 21' beam, 8' deck to keelson and 146 tons. They speak of the 42 pdr. Long Tom with a fault at its muzzle caused by a 6" shot and agree with Dawson's

armament but not his tonnage. The Shepards name the six carriage guns as follows:- port side from aft - Bouncing Betsy, John Bull's Bellyache, and Hell and Destruction; starboard side - Orders in Council, Lord Nelson, and Free Trade and Sailors' Rights. They speak of the pivot gun as being dismounted in action, replaced, and later dropped down the hatch in order to sink the vessel to prevent capture. She was also set on fire. Their account of the Fayal battle as well as the rest of the material in the book is extremely well written, interesting, and seems to follow most, if not all, of the historical happenings. I have met the Shepards, who live near New London, Conn., and they claimed that all of the information they used could be authenticated.

A photograph of the "42 pdr." was sent to me by Commander L. J. Tobin, Administrative Officer of the U. S. Navy, Supt. Naval Gun Factory, Washington, D. C., on August 2, 1955, and I believe that a copy of this picture could be obtained from that source. The construction of this cannon seems almost identical with that illustrated and written up by Louis de Tousard in his "American Artillerist Companion" of 1809, who copied French material. His iron 36 pdr. and this "42 pdr. GENERAL ARMSTRONG gun" are compared below and seem to agree very closely:

	Bore	Circ. Breech	Cacobel	Button Circ.
36 pdr. French model	6 7/8"	6'-4 3/4"	21 3/4"	Estimated 1 cal.
The so-called 42 pdr.	6 7/8"	6'-6"	24"	---

Diam. Trunnion (not including rim base)	Length Trunnion	Trunnion to Muzzle	Weight	Touch Hole to Muzzle	Overall Length	Diam. Muzzle Swell
6"	7 1/2"	5'-10 3/4"	App. 2700 lbs.	9'	10'-8 7/8"	18 1/2"
7"	7"	5'-8"	--	9'- 1/2"	10'-10"	19"

Where Tousard gives no corresponding dimensions, these are estimated to the nearest fraction of an inch. (He gives 6.88" for his 36 pdr. A French 36 pdr. = 6.895 English inches. An English 39 pdr. would be 6.85", a 40 pdr. would be 6.904", and a 42 pdr. 7.018".) Theoretically this gun would be a 36 pdr. French gun, although when used in America they were often designated as 42 pdrs. The gun was originally from the French 74-gun HOCHE, which was taken from the French by the British, October 12, 1798, and later renamed the DONEGAL, according to Clowes' "Royal Navy"; later her battery was sold to the United States and for a time served in the privateer HAYTIAN. The gun was returned to New York prior to 1812 and was then mounted on the GENERAL ARMSTRONG. Some years after 1814 the Long Tom was recovered from Fayal where the GENERAL ARMSTRONG was sunk to prevent its capture by the British (Sept. 28, 1814), and the cannon was presented to the U.S. government by the Portuguese. It is now at Leutze Park at the Naval Gun Factory. The gun mount for the long 12 was probably similar to that shown on Page 171 of Chapelle's "History of American Sailing Ships" for the British schooner UNION.

The great grandson of Capt. Samuel Reid - Mr. Reid Sanders, 47 Waterston Avenue, Wollaston, Mass. - may have some additional data, model, or plans of this privateer. The Museum of the City of New York has some mementos of Capt. Reid and the ARMSTRONG but evidently has no plans of her.

-Edwin Newell Rich

NOTES AND COMMENTS

THE MUCH-MALIGNED 44's

A seldom-questioned commonplace of nautical research is that the two-decked 44's of the late 18th century British navy were a bad lot of ships. Since the present writer believes that behind an unexamined assumption is just the place to look for surprising and refreshing material, he took the trouble to inquire into the matter.

Three draughts of 44's are listed in the National Maritime Museum's classified list of photostats: H.M.S. ROEBUCK (1774), CHARON (1778), and SERAPIS (1782). The SERAPIS that Jones fought was built in 1779. Observe that the Admiralty was constructing these ships before the American war broke out, when it was on the point of becoming a European war as well, during the disastrous year of 1779 when Great Britain lost control of her home waters to the allied French and Spanish fleets, and at the end of the war when hostilities had all but ceased. It seems curious that they would continue to be built if they had not proved their value in some kind of naval service.

What sort of service did they perform? Mainly as flagships of small squadrons and convoy guard, though they sometimes took their place in the line, so thin were British naval resources stretched. One would surmise that, whatever else their defects may have been, they were pretty well adapted to the sort of work they did; the sight of two tiers of gunports from a prudent distance must have deterred many a less than lion-hearted privateer from attacking a convoy. Moreover, it is no secret that naval officers were not indifferent to considerations of dignity and prestige; the prospect of commanding a two-decker must have had its value in persuading an officer to accept what otherwise might have been an unwelcome assignment. On the other hand, some officers may have shied away from them, feeling with some justice that they might be called upon to do a 64's or even a 74's work without either's power. When the 38-gun frigate came along, which when armed with carronades carried up to 50 guns, the 44's were rendered superfluous and vanished.

To turn to the ships themselves. Two chief complaints against them were that they were overcrowded, and that their gunports were too close together. A comparison of the dimensions of the ROEBUCK, CHARON, and SERAPIS throws some interesting light on these alleged defects:

	ROEBUCK (1774)	CHARON (1778)	SERAPIS (1782)
Length of Gundeck	140'-0"	140'-0"	140'-2" (as built)
Beam (Extreme)	37'-10"	37'-9 1/2"	38'-0" (as built)
Depth of Hold	16'-4"	16'-4"	16'-4 1/4" (as built)
Keel for Tonnage	116'-4 3/4"	115'-9"	115'-5"
Tonnage	885-85/94	879-26/94	888-64/94

If these ships were too small and hence overcrowded, certainly no attempt seems to have been made to enlarge them throughout the war. As for the distance between gunports, one might use as a standard of comparison the distance between the lower-

deck ports of the 74-gun ship ALFRED, launched in 1778; this appears to have been just about 11 ft. center to center. Distance between lower-deck ports on the ROEBUCK and the CHARON, however, turns out to have been 12 ft.; that is, there was greater distance between ports cut for the 18 pdrs. of the 44's than for the 24 pdrs. of the ship-of-the-line. The upper-deck ports of both the ROEBUCK and the CHARON were also 12 ft. apart, center to center, where only 9 pdrs. were to be mounted; the upper-deck ports on the ALFRED were again 11 ft. apart, though here 12 pdrs. or perhaps 18's were to be mounted. To make one more illuminating comparison, the lower-deck ports of the SAN JOSEF, captured by Nelson at St. Vincent, were 11 ft. 6 in. apart, center to center, still short of the distance between the lower-deck ports of the two-decked 44's.

I have not space in a short note to go further into the complaints made about the 44's, but enough seems to have come to light here to make one wonder if it were not a case of "Give a dog a bad name." They were too small to take part in great battles; they were too big to do the work of a handy 32-gun frigate and make their captains handsome fortunes; in the eyes of the 18th century British naval officer, appointment to one represented the cheerless prospect of even such unglorified, unrewarding drudge work as the SERAPIS was performing when she encountered John Paul Jones. They seem to have taken their discontent out in maligning the ships.

Given the close similarity in dimensions of these three 44's, it seems very likely that the SERAPIS of 1779 was much the same size and, except for details, appearance. The 44's were designed for batteries consisting of twenty 18 pdrs. on the lower deck; twenty-two 9 pdrs. on the upper deck, which, except for gangways, was open between forecastle and quarterdeck; and two 6 pdrs. on the forecastle. There were to be no guns on the quarterdeck. However, by 1782 the carronade had been accepted in the British navy, and the SERAPIS of 1782 had barricades and ports for ten guns on the quarterdeck.

-James S. Ferguson

H.M.S. FOUDROYANT and H.M.S. CRESSY

A letter from Paul Palmer (see The Nautical Research Journal, Vol. 10, page 71) states: "The Danes have also an old frigate JULLAND, a hundred years old, and the only one in existence in Europe from that period." Well, we here in Great Britain have two frigates, both afloat and, as far as I am aware, in quite good condition. There is the training ship FOUDROYANT moored at Gosport, at the entrance to Portsmouth harbor. This ship is built of teak, not the conventional oak, and was launched at Bombay in 1817. She was a fast little frigate and served the Royal Navy well. Her busiest period was around the mid 19th century; the tours of duty included patrolling the trade routes off California, blockade of Sitka, Indian troubles at Vancouver Island, and service in the Crimean War. The armament of the ship at that time consisted of twenty-four 32 pdrs. and two 8" shell guns. Incidentally, she was launched as H.M.S. TRINCOMALEE. The name she now bears was given to her in the late 19th century after Nelson's FOUDROYANT was lost in a gale.

Our other frigate is H.M.S. CRESSY, in use as a naval reserve training ship in the Earl Grey Dock at Dundee, Scotland. She was launched at Chatham, England, in 1824 as a big 44-gun frigate. Her name then was UNICORN, but this was changed later to avoid confusion with a World War II aircraft carrier. Since being berthed in the present dock the ship has had an attack of middle-aged spread, thus making her a permanent prisoner, the entrance being narrower than her beam.

-Bernard T. Wardle

BOOK REVIEWS

COMMONWEALTH: Giantess of the Sound - By Roger Williams McAdam. Illustrated with photographs. 193 pp. New York: Stephen Daye Press. $5.50.

Mr. McAdam's newest book, and the third he has contributed to the history of the Fall River Line, is a tribute to the huge COMMONWEALTH. Steamboat buffs will undoubtedly welcome it with the same enthusiasm they bestowed on the others.

In 1905, when the potentates who directed the destinies of the Fall River Line were confronted with a rival in their very own Long Island Sound, they wasted little time in directing the Newport (R.I.) Shops to design a new steamer that would restore the balance of power. When the new boat was launched two years later (October 9,1907), she was the largest steamer to ply the Sound, 456 feet overall with a beam of 95 feet over the guards. In fact she was the second largest sidewheeler ever built, exceeded only by that unfortunate giantess, the GREAT EASTERN of 1858. (She was 692 feet long.) The Line's tradition of adopting names beginning with P (PILGRIM, PURITAN, etc.) was shattered when she was christened COMMONWEALTH.

The five thousand visitors who crowded aboard on July 9, 1908, found this to be merely one of a series of broken traditions. The red and gold carpeting, a trademark to the faithful, had disappeared. The customary masts had been omitted. Other surprises awaited the skeptics. Could any but the most blase traveler help being overwhelmed by the glittering accommodations? A later generation (untroubled by sentiment) might be forgiven if it confused the Louis XVI library with a prosaic ice cream parlor, but the passengers of the early 1900's delighted in the English Renaissance cafe. And high above - another break with the Line's tradition - was the dining room in a roof garden atmosphere most certainly to be appreciated by the haut monde. But it was not until 1932 that the Line permitted dancing; sin, if it intended coming aboard the COMMONWEALTH, would have to hide itself behind locked stateroom doors.

After receiving the homage befitting a new queen on her maiden voyage in 1908, the COMMONWEALTH devoted herself, as a proper Fall River Line steamer, to accumulating money for the management and folklore for the later historians. Enthusiasts will revel in the dozens of photographs, although others may carp at their small size. If a churlish reader should protest that it appears from this chronicle of the COMMONWEALTH that when adversity is routed by prosperity, it most surely follows that prosperity, in turn, will be overcome by disaster, the reader should be reminded that history on the Fall River Line would be a simple recital of facts if nostalgia (the faithful catalyst) were omitted.

Dr. E. Richmond Ware is looking for a dependable ship model builder who can make some minor repairs on a brigantine model, some 11 or 12 inches in length, which was constructed for him by Samuel Walker of Marblehead, Mass. "The little ship is a beautiful job, and I do not want it tampered with by anyone who will not do a good job."

Write: Dr. E. Richmond Ware
416 Wilshire Medical Building
1930 Wilshire Boulevard
Los Angeles 57, California.

NORSKE SEILSKUTER: Fredhøi's Forlag A.S., Oslo, 1934-1942. Illustrated. 7 Volumes, 80 pp each. Contents of Vols. 1 - 6 reprinted in a single volume, 1944.

These volumes contain pictures and brief accounts of the careers under the Norwegian flag of almost a thousand sailing vessels. Almost all were built in the 1850's or after, and most of them were square-riggers. About one-third were Norwegian built, these being mainly small wooden barks, another third were former British iron or steel vessels, the rest originally sailed under a dozen or more different flags. The last include over a hundred built in Canada and about fifty from the U.S.

I have found these books of considerable help in tracing the later years and final fates of former American and British ships whose histories as given elsewhere end with the information that they were sold to the Norwegians. The books are indexed under the ships' Norwegian names. In most, but not all, instances the text gives the former names, if any.

The pictures are reproductions of photographs and paintings. The quality of the reproductions varies widely, the average being rather poor. Those in the single volume reprint of Volumes 1 - 6 are markedly inferior to the corresponding pictures in the original separate volumes.

The text is in Norwegian, but even with no prior knowledge of that language, I have had no serious difficulty in getting the sense out of it. No great ingenuity is needed to interpret such statements as those telling that the bark SIGURD was "bygget av Russell & Co., Pt. Glasgow, 1892, av stål, 1499 tonn", or that she "strandet på Bahamabanken den 8. februar 1920." An occasional reference to a dictionary will clear up any doubtful words.

-Frank W. Thober

DESTROYER SQUADRON 23: Combat Exploits of Arleigh Burke's Gallant Force - by Ken Jones. Charts. xiii + 283 pp. Philadelphia and New York: Chilton Co. $4.95.

"Destroyer Squadron 23" is a fast-paced history of Arleigh Burke and the destroyermen he knit into an efficient fighting force, from the time Burke went on board the CHARLES AUSBURNE as Commodore in October, 1943, until he was appointed Chief of Staff to Admiral Marc Mitscher on the carrier LEXINGTON. According to the author, when Burke took over Squardron 23 (composed of the eight destroyers of Divisions 45 and 46) morale was gone, and it was a rare occasion that found two of the ships operating together. The U. S. Navy had received a staggering blow some months earlier in the night operation at Tassafaronga, off Guadalcanal, when the Japanese commanded by Admiral Tanaka sank the heavy cruiser NORTHAMPTON and knocked out three others. Damage was so severe that these did not see action again until a year later.

From here the book moves smoothly on to the engagements at Savo Island, Empress Augusta Bay, and finally the "perfect battle" at Cape St. George. Ken Jones's years of experience in magazine and newspaper writing are very evident here. He writes with vigor and (so long as he confines himself to operations) clarity. In brief sketches and flashbacks we get glimpses of youthful pranks at the Naval Academy; the familiar story of wives searching for apartments in overgrown little towns while husbands cursed at the slowness of shipyards; a younger Burke being berated in 1939 by a four-striper because of "too much morale" on the U.S.S. MUGFORD, the first command of the present Chief of Naval Operations; and the grim ritual watched by horrified Americans when seven Japanese on a raft killed themselves one by one rather than be saved by the enemy. All together, these scenes provide a convincing picture of action on the South Pacific.

The book is based on official records. Mr. Jones also consulted many of the officers who served in Squadron 23. The dialogue is realistic and believable. In this connection the author states: "All TBS (Talk Between Ships) transmissions are recorded word for word as they appear in the official record.... All other dialogue is substantially supported by log entries, by signed battle reports, by war diaries, or by official memoranda, or else reported orally or in writing to the author by the speaker."

Mr. Jones is far less successful when he tries to "present clearly the origins of the compulsions which prompted such deeds" of heroism. In attempting to explain the qualities of leadership, the best he can do is fall back on the word "mystique"; it crops up everywhere. The rhapsodizing on the subject of leadership permeates the narrative from the beginning to the end. In plain language, it becomes a panegyric. After a little of this the reader wonders if Mr. Jones originally planned this material for "Boy's Life" or perhaps a prospectus for the Naval Academy.

A word of thanks is due the anonymous draftsman who made the charts. They are excellent.

- Roy Rogers

MOST DANGEROUS SEA: A History of Mine Warfare, and an Account of U. S. Navy Mine Warfare Operations in World War II and Korea - by Arnold S. Lott. xiv + 322 pp. Photographs, Charts, and Diagrams. Annapolis: U. S. Naval Institute. $6.00.

The high caliber set by the Naval Institute's earlier books on combat operations during World War II is maintained in this fine history of mining and mine warfare. In his dedication, Commander Lott states that "mine warfare is a dreary business: always dull, sometimes dangerous, and at times deadly." No reader of "Most Dangerous Sea" could doubt the truthfulness of this observation.

The area covered is huge. After an opening chapter that briefly traces the ancient origin of mine warfare, starting with the famous Greek fire, and ending with a summary of World War I, the author gets down to business with the scene at Pearl Harbor on December 7, 1941. From there he discusses in detail mine warfare all through World War II and the Korean War, from the mine fields laid by German submarines on the east coast of the United States to the efforts of American forces to make Japanese waters safe for shipping after the surrender at Tokyo Bay.

"December 7, 1941, found the Navy - if not exactly prepared for extensive mine warfare, at least not completely unprepared. The one building in the Washington Navy Yard, which had been the Navy's sole mine research facility in World War I under Lieutenant (jg) L. W. McKeehan, had grown to the sprawling Naval Ordnance Laboratory at White Oaks, Maryland." This was the result of a realistic appraisal of the developments in minecraft. The United States had already established liaison with British experts who were working in this field, and the first American casualty occurred when Ensign Charles W. Howard was killed while trying to dissect a German mine in England on July 11, 1940. Still there was no overall acceptance of mine warfare. "In some circles there still lurked strong suspicions that mine warfare was a rather sneaky way to eliminate the opposition."

Despite the valuable lesson taught the English in the first World War, especially after the remarkable success of the huge North Sea Barrage, they accepted the use of mines because they could not avoid doing so. Didn't the first Sea Lord of the Admiralty look upon this kind of warfare "as unpleasant work for a naval man, an occupation like that of rat-catching..." The same opposition prevailed until the war's end. Commander Lott believes that the war could have been won months earlier

if the Air Force had agreed to "Navy demands for a heavy-bomber mining campaign against Japan." The Navy arguments finally bore fruit in Operation Starvation, when General Arnold ordered the mining of Japanese home waters by Air Force B-29's, commencing April 1, 1945.

In this book Commander Lott has covered practically everything the average reader will want to know. Included are descriptions of degaussing, types of mines, the techniques of mine laying and mine sweeping, net tending, the types of vessels used, and on and on. That he can also include accounts of literally hundreds of ships and men without ever bordering on dullness or statistics is proof of his writing ability. Professional writers might envy his talent. (If statistics are wanted, they will probably be found in the eight convenient appendices.)

"Many senior officers went through invasion after invasion without seeing a minesweeper, because by the time they got where they were going, the sweepers had been and gone again." The men in the mine force understood this. Their motto was: "Where the fleet goes, we've been." Commander Lott has served them well.

-Roy Rogers

ADMIRAL THUNDERBOLT - by Hans Christian Adamson. Illustrations and Maps. xii + 336 pp. Philadelphia and New York: Chilton Co. $5.95.

This is an "imaginative biography" of Peter Wessel, better known as Tordenskjold, the Danish naval hero of the time of Charles XII of Sweden. It is destined for popular consumption, not for the scholar, and hardly for the nautically informed, and to comment upon it from the viewpoint of these would be somewhat absurd. It may entertain those who are seeking a historical novel.

SMALL CRAFT AT MYSTIC SEAPORT - by Edouard A. Stackpole and James Kleinschmidt. Illustrated with photographs, drawings, and plans. 82 pp. (Paperbound). Mystic, Conn.: The Marine Historical Association, Inc. $2.00.

This booklet gives a description and some information on the history and development of about fifty small craft on display at Mystic Seaport. Each is illustrated by one or more photographs or pen and ink sketches. They are mostly from the Atlantic coast between Maine and the Chesapeake Bay, and include fishing boats, whaleboats, yachts, lifeboats, canoes, and a few others. There is an appendix with the lines of nine of the vessels.

The principal value of the book is in the illustrations. These, both photographs and drawings, are generally clear, well-reproduced, and give a good idea of the characteristics of the boats. The text, however, is of little value. Ranging from a few lines to over a page for each vessel, it shows no evidence of any serious research into the history and development of the various types. It appears that the authors used whatever information was handy. More space is devoted to a boat used in recent Olympic games, for example, than to some other craft that have greater historical importance. Annoying inaccuracies, inconsistencies and misleading statements are scattered through the text. For example: In some places the masts of a ketch-rigged vessel are called fore and main; in others, main and mizzen. The dimensions of several vessels are given twice, but in five cases the two sets of dimensions do not agree.

The casual tourist might enjoy thumbing through this booklet while strolling around Mystic Seaport, but there is little reliable information here for the serious student of small craft. It is disappointing to find a museum and historical society publishing this sort of book.

COAST GUARD CUTTER MANHATTAN

BY CHARLES S. FOX

CONCLUSION

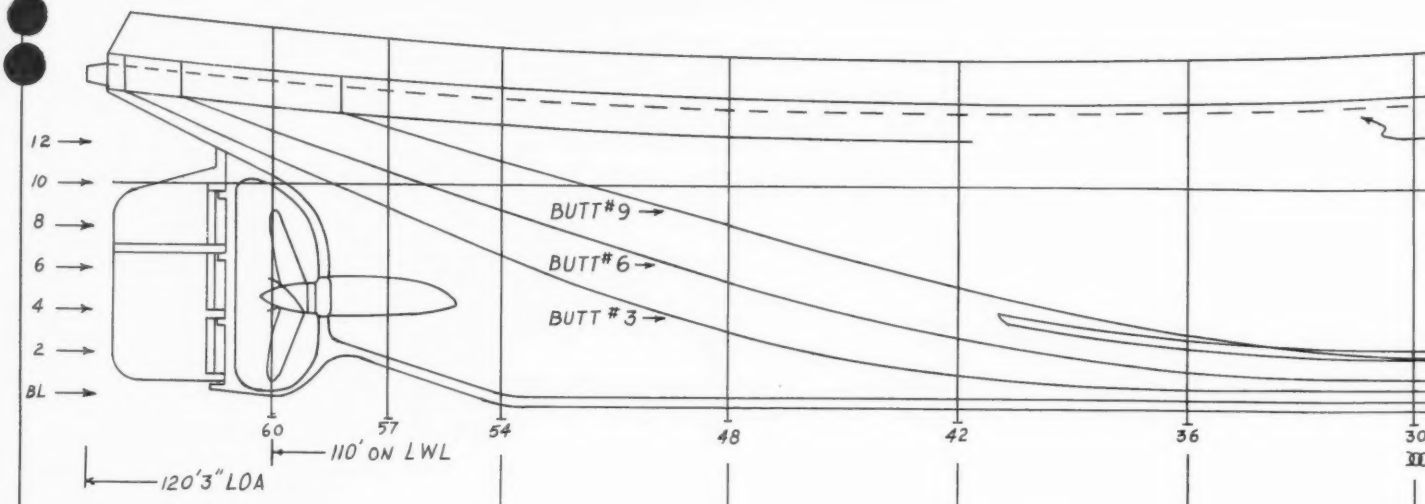
In developing the plans of the MANHATTAN, many minor modifications and some major changes were made in order to have the plans conform with the actual vessel. Some of the changes made:

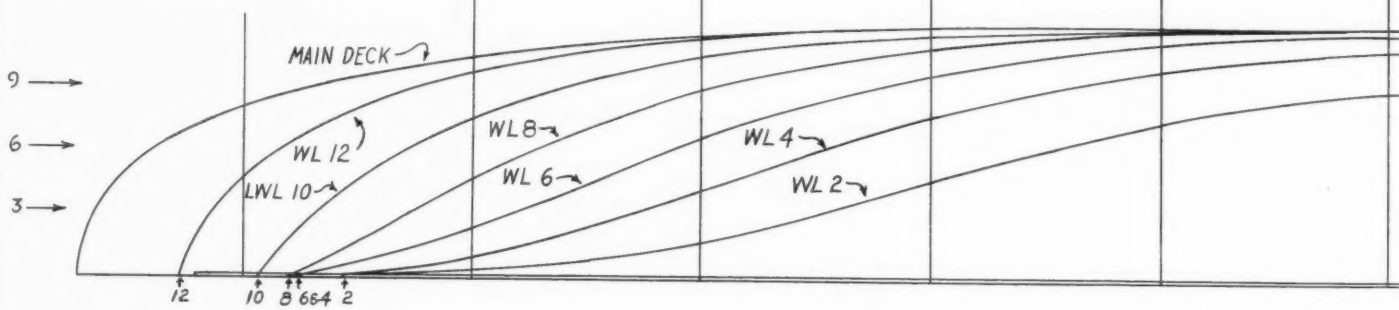
1. Boom on forward mast removed and bow davit installed.
2. Radio room behind wheelhouse removed and stack lowered.
3. Motorized launches removed and replaced by lifeboats.
4. Fire fighting nozzle on top of wheelhouse removed.
5. Lifeboat davits rearranged.
6. Wheelhouse window arrangement altered.
7. Minor details added or revised in accordance with photographs.

As noted in the 1958 edition of "Merchant Vessels of the United States", the MANHATTAN is now the HAZEL, Official Number 253504. Her call letters are indicated as WB 6216, and she is owned by the Florida Towing Corporation, Jacksonville, Florida. Her home port is Jacksonville. An effort was made to obtain more information from this concern, but no answer was received.

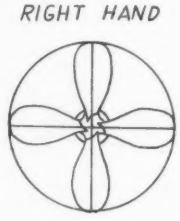
A note of appreciation is due Mr. William D. Wilkinson, without whose assistance, plans, and library, this project could not have been completed.

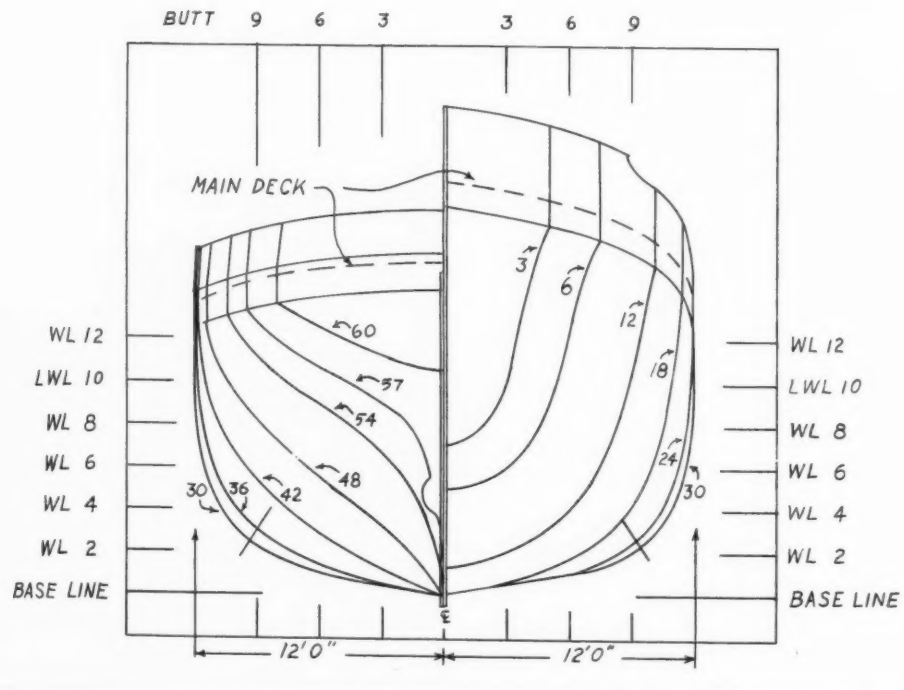
THIS PICTURE FROM THE NATIONAL ARCHIVES SHOWS THE HULL OF THE MANHATTAN JUST AFTER BEING LAUNCHED IN DRY DOCK WITH THE AID OF A CRAINE.

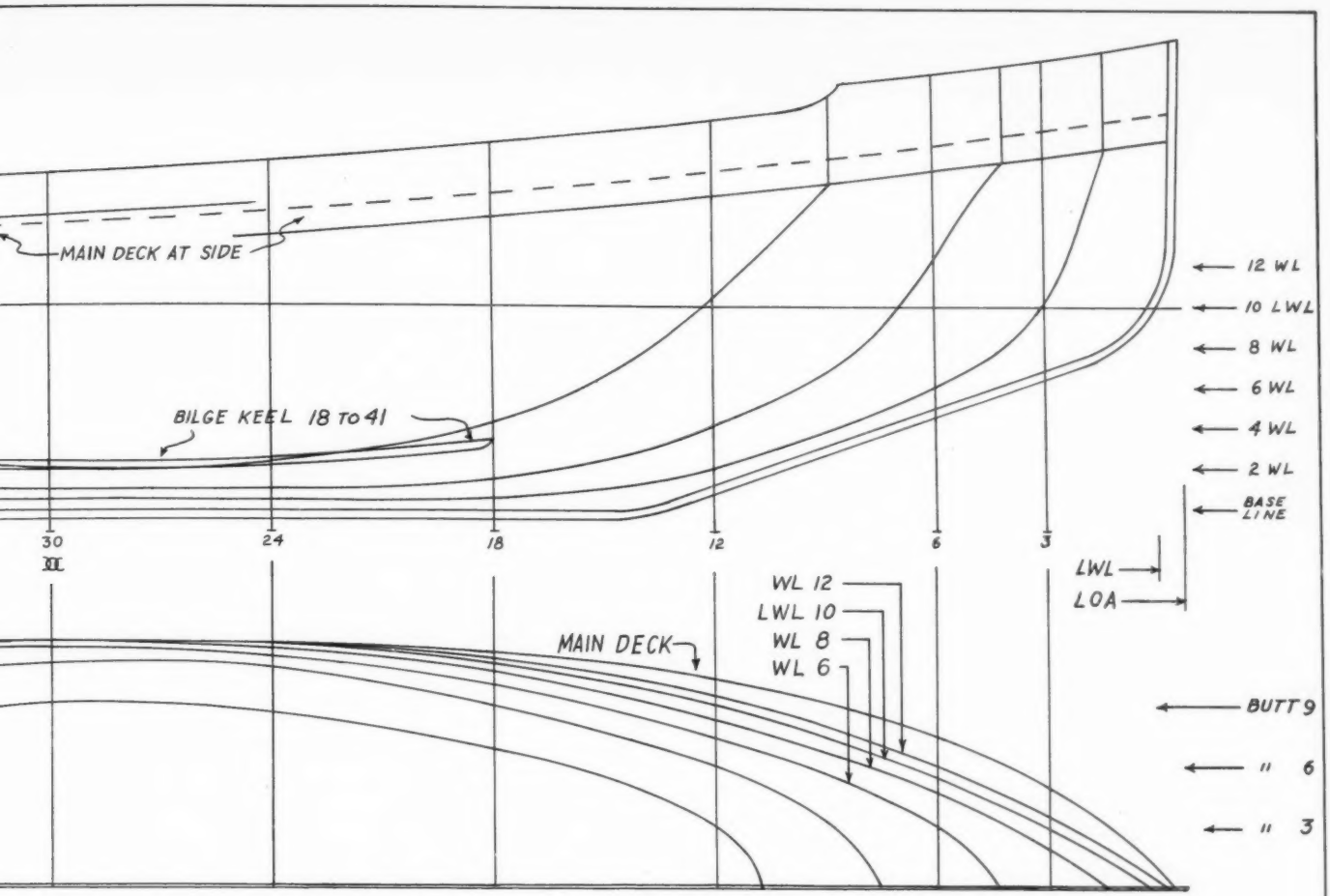


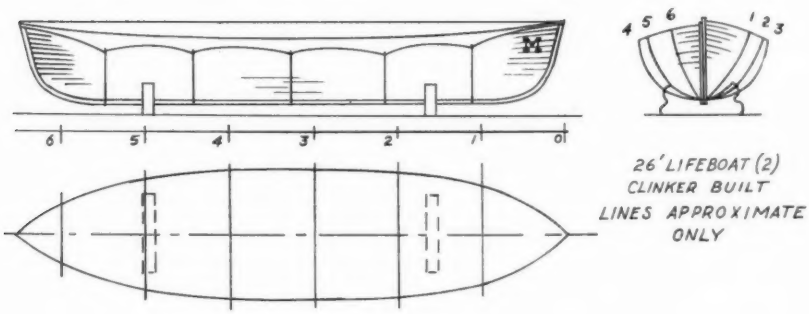


—PROPELLER—
4 BLADED
RIGHT HAND









26'LIFEBOAT (2)
CLINKER BUILT
LINES APPROXIMATE
ONLY

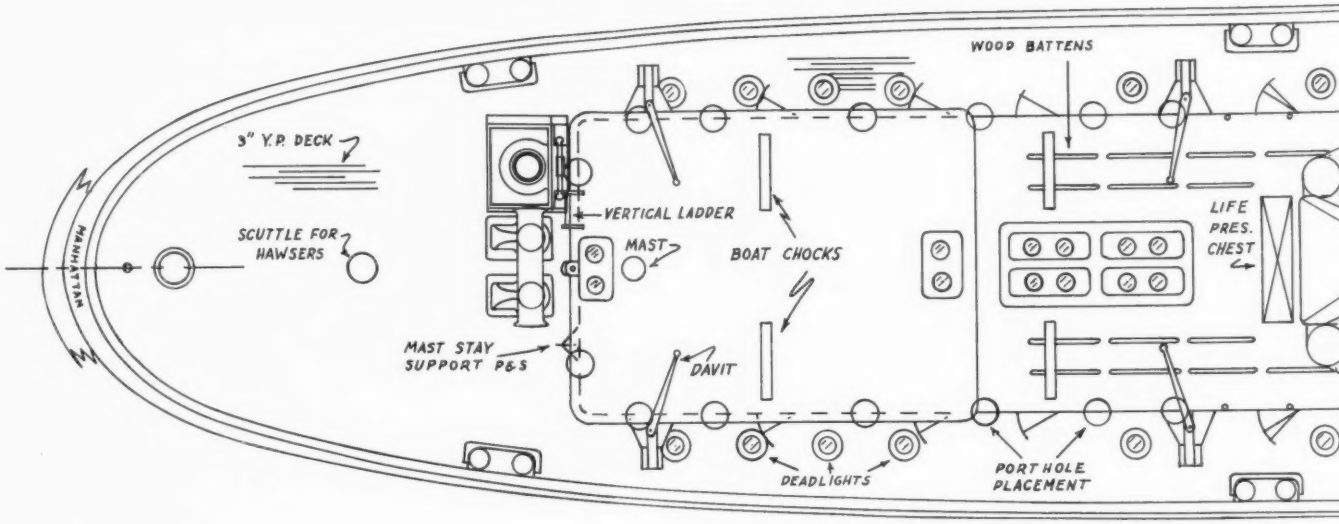
5 0 5 10 15 20 25 30
SCALE IN FEET

U.S. COAST GUARD
CUTTER NO. 30
MANHATTAN
LAUNCHED JUNE 15,1918
BALBOA, CANAL ZONE
L.O.A. 120'-3" BEAM 24'-0"

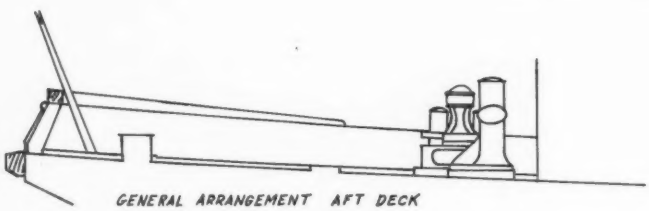
DRAWN BY CHARLES S. FOX

SHEET 2 OF 3 SHEETS

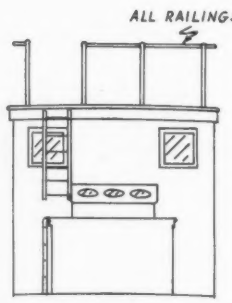
THE NAUTICAL RESEARCH JOURNAL
VOLUME 11, NO.1 SPRING, 1960



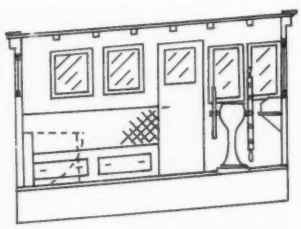
PLAN VIEW

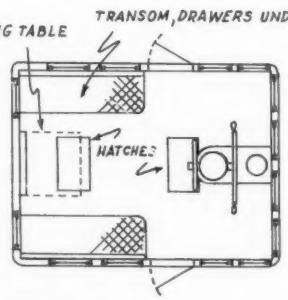


GENERAL ARRANGEMENT AFT DECK

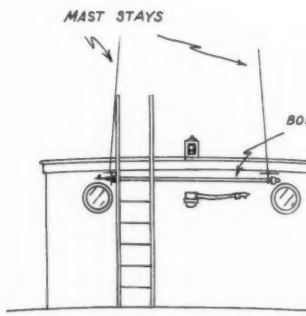


AFT SIDE OF WHEELHOUSE

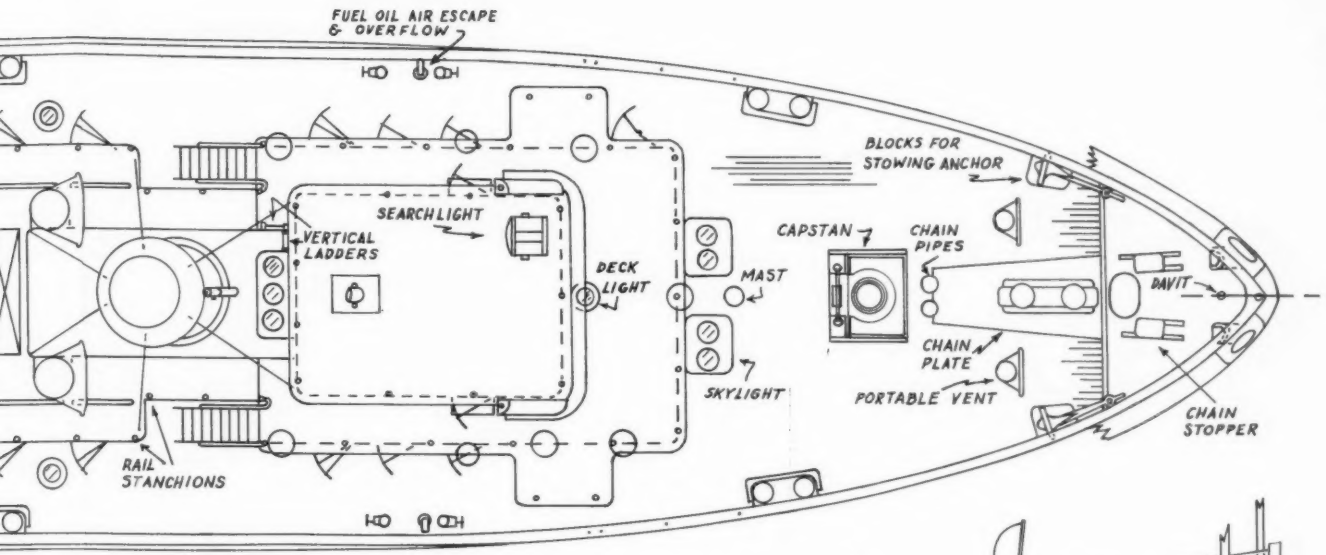




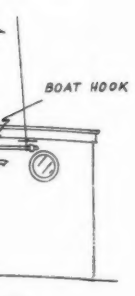
INTERIOR OF WHEELHOUSE
STAINED & VARNISHED WOODWORK - METAL BRIGHT



AFT SIDE MAIN CABIN



GENERAL ARRANGEMENT - FORWARD DECK



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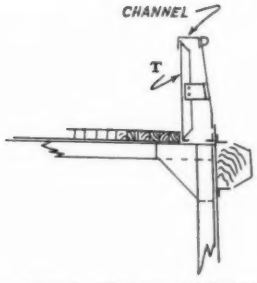
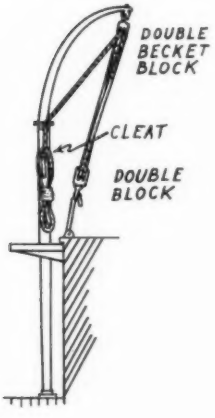


CROSS SECTION OF BULWARK SHOWING SUPPORT CONST.

DAVIT DETAIL



U.S. COAST GUARD
CUTTER NO. 30
MANHATTAN

LAUNCHED JUNE 15,1918
BALBOA, CANAL ZONE
L.O.A. 120'-0" BEAM 24'-0"

DRAWN BY CHARLES S. FOX

SHEET 3 OF 3 SHEETS

THE NAUTICAL RESEARCH JOURNAL
VOLUME 11, NO. 1 SPRING, 1960

INVESTMENTS

I have undertaken to push the work of George Campbell, A.M.I.N.A., in the United States. Most of us are familiar with Campbell as the drawer of the superb VICTORY plans in Longridge's book, "The Anatomy of Nelson's Ships", and the official restoration plans of the CUTTY SARK.

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4110 BEALL ST., LANDOVER HILLS, MD.

VOLUME 11, NO. 1 THE NAUTICAL RESEARCH JOURNAL SPRING, 1960

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